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MARGINALIA

GARAGE IN SAN FRANCISCO. The multi-storey urban parking-garage appears now to an unavoidable building type—it is one of the essential pieces of equipment for



1



2

L'Architecture d'Aujourd'hui

maintaining circulation in central areas—but its final architectural form seems far from inevitable still.

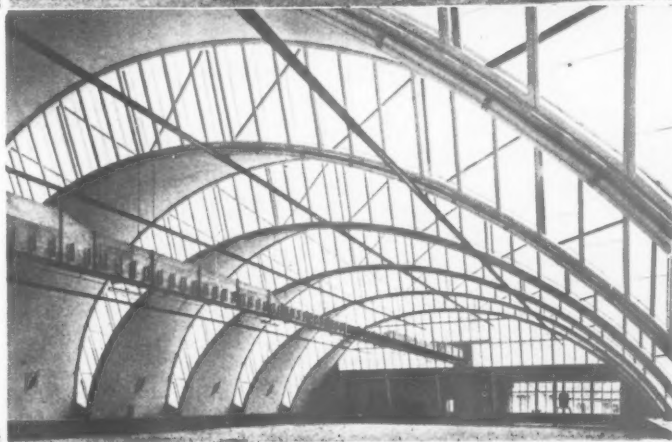
Basically it is a large filing-cabinet or storage-rack, and most so-called architectural approaches to the problem so far have only tried to dress it up as something else. Yet its inherent forms have their own architectural possibilities and the solution evolved by George Applegarth and his engineers, Ellison and Thomas, for a self-service garage in San Francisco, makes admirable use of the constituent elements, 1, making a handsome street-façade out of nothing but the balustraded floor-slabs, and using the access ramps in spiral form to give a corner treatment, 2, that is, literally, a new slant on Mendelsohn.

CANTED CYLINDRICAL VAULTS.

Inexpensive construction is not necessarily customary construction; unusual building forms can be made to answer cheaply to a specialized functional programme, and the new machine hall for an elastic factory at Gossau, Switzerland, 3, was built at 12 per cent less than the cost of a conventional factory structure of the same unencumbered floor-spread and performance. The architects, Danzeisen and Voser, were called upon to create a weaving-shed with a clear floor of 50 by 28.5 metres, northlit and well-insulated. The solution they evolved with their engineer, Heinz Hosdorf, was a run of seven canted cylindrical vaults of shell concrete construction, covered with two layers of cork and an outer armour of corrugated Eternit, which gives the added advantage of a good throw off for rain and snow. The north-facing lunettes between the high end of one



3



4

vault and the low of the next, 4, are double glazed, with a steel truss-structure, which stiffens both vaults, between the two layers of glass.

US CONSULATE IN TRINIDAD.

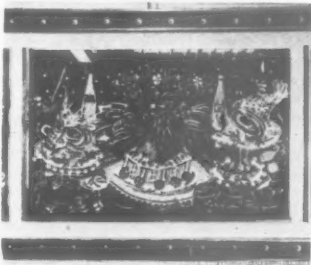
The enlightened policy of the US State Department regarding the design of its diplomatic buildings does not depend only on the use of designs by leading US offices; local architects are often associated with the design of new consular buildings from an early stage (AR, October, 1955). Occasionally such work is undertaken entirely by local designers, and a distinguished small-scale example of this aspect of the programme is the US Consulate General building in Port-of-Spain, Trinidad. Designed by Mence and



5

Moore, an English firm which maintains an office in Port-of-Spain, the building is designed to provide office and garage accommodation for consular staff, and public facilities for visa business and other formalities. It consists of a regular rectangular block on pilotis, 5, the ground floor loosely planned to provide public waiting-space, 6, storage facilities, and visa offices. On the upper floor, behind the long horizontal sun-breakers, are the typing pool, filing and coding rooms, and the offices of the Consul-General himself.

COTTON MURAL. The Stork Hotel restaurant in Liverpool, which has been designed by Reece Pemberton in 1955-6, has four murals in cottons, each representing cheerful gastronomic subjects, 7, and all framed together side by side. They were



7

designed and executed by Margaret Kaye. The backgrounds are respectively bright red, blue, grey blue and grey green, and the designs are built up in plain and patterned cottons, threads and lace.

The Art of Re-issuing IV

The architectural classics of the Forties have a special flavour of their own—not for them the Playboy Pleasure Principles of the Twenties (AR, Marginalia, August, 1954), nor the pugnacious certitude of the Thirties (Marginalia, January, 1956)—the mark of the period is neutral, if persuasive exposition, aimed at a common reader who was, statistically at least, more common than the readers of Geoffrey Scott or Morton Shand.

Characteristically, as far as England is concerned, the two most influential appeared first over Sir Allen Lane's Pelican imprint—Nikolaus Pevsner's *Outline of European Architecture*, and J. M. Richards's *An Introduction to Modern Architecture*—and both, happily, are



6

still with us. Mr. Richards's volume, which saw the light of day in 1940, was reissued earlier this year. It is now moving into its third hundred-thousand copies, its seventh printing and its third revision.

It is now established as the plain man's guide to the modern movement, and moreover is read in all English-speaking countries. It has played a part in establishing—of all things—the canon of accepted monuments on which the academic school of Italian theorists has based its theories (they have also paid it the compliment of plagiarising its diagrams).

As an instrument of the re-issuer's art it has one inestimable advantage—the whole material of the book is not contained within the matrix of an argument which begins on page one, and does not finish until the page before the index. Books of that kind—*Space, Time and Architecture*, for instance—grow unmanageable as more and more material is crammed into them, but *An Introduction to Modern Architecture* has an argument or exposition at its head, and the factual survey follows on behind. As a result, the number and type of buildings to be illustrated and described can be increased or revised according to need, while the opening chapters remain as compact and readable as ever. The book could go on growing and flourishing for as long as author and publisher may wish.

Prospect

The Royal Incorporation of Architects in Scotland has restyled its quarterly publication, and issue No. 103 has appeared as No. 1 of *Architectural Prospect*, with a cover

designed by Gordon Huntley and extensively revised typography and layout. The first of the restyled issues contains the sort of features that one might expect—personality-profiles, photographic competition, an interesting report on office experience in Denmark, and one on student experiences at US Universities—and also a well-deserved tribute to the pioneer architect-designed spec-builder houses by Alan Reiach for Morton and Johnstone at Joppa, outside Edinburgh, 8.



Prospect

ST. PAUL'S

The Holford plan for the surroundings of St. Paul's (the subject of an article on page 295) has had strong support from architects and architectural writers, and from many laymen besides. Below are extracts from some of the writings and speeches with which the plan was welcomed.

John Summerson, in The New Statesman and Nation:

... There is a grander possibility: that of remodelling the area around St. Paul's in such a way that the chaotic, arbitrary pattern of the city is brought into a local, precinctual harmony. This can be done—without artificiality, without archaism, without quixotic sacrifice. It is the natural and proud tribute of the twentieth century to the seventeenth. And this, it seems to me, is what Sir William Holford has succeeded in doing, with extraordinary technical skill and perfect appreciation of the nature of St. Paul's, both as a work of art and a historic building...

Sir William has seized the vital point that one does not necessarily want to see St. Paul's as one huge eye-full...

R. Furneaux Jordan, in The Observer:

St. Paul's is, and always has been, a glorified parish church hemmed in by the secular buildings of a maritime town. This does not mean that it must be denied a setting—far from it—but it does exclude all pretentious gestures and sham Italian glories. It means that the commercial buildings—which will arise anyway to wreck the scheme if they are not part of it—must not only be incorporated in the setting, they must themselves be the setting.

John Betjeman, in The Daily Telegraph:

The Holford plan keeps Wren's narrow vistas and recognizes that London is not a cathedral city like Ely or the Vatican or Wells, but a city with a cathedral in it, rising from the houses...

As to the style of the buildings to be erected in the Churchyard, I think it would be the greatest mistake to make them monumental

and of Portland stone like the Cathedral. I am even a little unsure of the look of Temple Bar placed alongside the North Front because it is so different in scale and so similar in style.

Julian Huxley, in a letter to The Times:

The Holford scheme takes account of this unique quality of the site. It gives us the vital quality of planned informality, in place of unplanned chaos on the one hand and doctrinaire grandiosity on the other. Above all, the plan has style. Do not let us forget that planning style is something quite different from architectural style, though some of Sir William Holford's critics seem to be confusing the two.

Sir Hugh Casson, in a letter to The Times:

Uniformity—the application of the straitjacket and the mask—is sometimes appropriate and may seem superficially attractive, particularly when judged from models and plans, and thus from an angle at which in fact it will never be seen, but too often it achieves order at the sacrifice of richness, freedom, and efficiency. Far more subtle and effective (and, indeed, more practicable) is Sir William Holford's conception with its carefully disposed contrasts of height and silhouette, of enclosure and open space, and how much more appropriate to the City of London, the true quality of which has always lain in its reticence and mystery.

The Hon. Lionel Brett, in a letter to The Times:

Sir William Holford has brilliantly succeeded, we think, in embodying the traditional and unique character of the City of London in forms which only our century could have conceived. It is possible to say without exaggeration that the piazza he envisages could be as lovely as those of St. Mark, and as spectacular. But it is not possible to prove it. Here we need an act of faith on the part of the Ministers, in the pure sense of an act in which one's personal opinions are subordinated to those of a greater consensus.

Brian Westwood (President of the Architectural Association) in a letter to The Times:

To me, and I believe the overwhelming majority of my profession, the principal merits are: That it carries on the interest and excitement of the informal balanced kind of planning exemplified in the eighteenth century by the *jardin anglais*; that it seeks to emphasize the formal architecture of the cathedral rather than compete with it, and gives the urban quality of enclosure rather than the obvious 'opening out' which is the alternative; it is human in its scale and approach and perpetuates the genuine character of the City as it used to be, in the manner judged to be most appropriate to our way of life at the present time.

I feel that the best possible authority has been commissioned and that a brilliant scheme has been produced. The design should therefore be accepted and not whittled down till it loses its vitality.

Basil Spence, in a speech at the RIBA annual dinner:

I believe Sir William Holford has

provided a sensitive English setting to St. Paul's which is far more in the Tradition than any imitation could ever be because one must realize the simple fact that our forebears were not imitators of past styles but courageous and inventive discoverers. This, Sir, is our tradition—let us look at the Holford Plan in this light.

Christopher Hussey in Country Life:

Sir William Holford has had recourse to the empirical methods of landscape architecture—an essentially English art which has, in fact, created the settings of all the great Classical buildings in this country, and, whether consciously or unconsciously, shaped the typical cathedral close where buildings of varied shape and character combine with lawns and trees to make the perfect visual setting to monumental architecture...

The (imaginary) buildings in every case are shown as of light, airy construction, so that the dramatic masses of the Cathedral are not diminished but set off, magnified. Varied as are their shapes, moreover, there is implicit throughout them the regular scale of proportion imparted by modular construction: that re-statement of the Classical principle inherent in the use of parts made to standardized dimensions.

Leading Article in Country Life:

The correlation of the complex material factors involved by modern city planning with the promptings of the eye and imagination has come to be generally recognized as demanding of the town planner something of that empiricism which English garden designers were the first to realize as fundamental to pleasurable landscape and no less to town scenery.

The elastic organic method of planning is based on meeting fully all material requirements, but gives the latitude for account to be taken also of such imponderables as atmosphere, local character and scale, and for the uncompromising forms of modern building to be varied and grouped with regard to visual qualities. Previous plans for St. Paul's precincts have been unsatisfactory because they failed to make this synthesis. The new model, although adjustments no doubt will and (owing to its nature) can properly be made to it, shows outstandingly how the visual and the utilitarian can be fused into an organic composition—a modern restatement of the traditional cathedral close—by a sympathetic designer.

From a debate in the House of Lords, reported in The Times:

Viscount Esher: it would have been so easy to have surrendered to the clamour of the neo-Georgians and to have repeated, with wide open spaces and elaborate vistas, the vast areas which had destroyed the approaches to St. Peter's, Rome.

With courage and vision Sir William Holford gives St. Paul's some extra space, removes its thunderous traffic, and leaves the great cathedral surrounded, but by no means dwarfed or obliterated, by this cluster of housing.

Lord Mottistone: Sir William Holford's proposals seem to include everything. It is an unfolding plan that brings the City to the cathedral, which seems to have grown there and not to have been imposed. The plan is full of

the element of surprise and happy in consequence, and it is wise not to have attempted complete symmetry where it can not be obtained. Ludgate Hill rules out complete symmetry.

Lord Conesford: the Holford plan is lively, vigorous and beautiful. It is in accordance with the English tradition, which is urbane and intimate rather than grandiose and monumental.

R. Gordon Brown, architect of the buildings in Hong Kong, illustrated on pages 316-325, has been Professor of Architecture at the University of Hong Kong since the school of architecture there was first established in 1950. He was trained at the AA, London, qualifying in 1937. After war service in the army he returned to the AA as Principal



of the school and was responsible for building it up again after its reduced war-time activities. He left in 1949 to become Professor of Architecture at Edinburgh University until leaving for Hong Kong. He is consultant to the Hong Kong government for their water-front reclamation scheme, and has designed a new City Hall. His private practice includes a new Government headquarters at Jesselton, North Borneo, amongst other work in that colony.

ACKNOWLEDGMENTS

COVER: Helen Simpson, Arphot. MARGINALIA, pages 291-2: Mural, S. Bale; Trinidad consulate, A. D. Porter; Prof. Brown, Elliott and Fry. FRONTSPIECE, page 294: H. Zinfam. BANK OF ENGLAND PRINTING WORKS, pages 299-307: 2, A. Handford; rest Galwey, Arphot. DERELICTION II, pages 308-315: 1-4, 13, 18, Aeroflms; 5-7, 14, 16, 17: K. Browne, Arphot; 8, 9, 19: Air Ministry; 10, Mr. and Mrs. S. Darby; 11, Courier. JAMES ADAM AND THE HOUSES OF PARLIAMENT, pages 326-9: A. C. Cooper. CURRENT ARCHITECTURE, pages 330-2: Flats in Osnaburgh Street and Centre in Welwyn Garden City: J. R. Pantlin; House at Moor Park: Sam Lambert. MISCELLANY, pages 333-334: St. James's Park Footbridge, H. Simpson. Leine Schloss, 1, Staatliche Bildstelle, Berlin; 2, 3, H. Wolff. Soane Barn, Lewis & Randall. Reculver, Nairn, Arphot. Gotherburg Mural, Ulf Thoren. Exhibitions, 4, J. Underwood; 5, D. Farrell; 6, B. Seed. Embassy Buildings: 1, 2, MOW; 3, 4, Galwey. SKILL, pages 345-360: Hall at Southampton: J. Maltby. Design Review: TV sets, Hiller & Swatton; Elsam, Mann & Cooper, and others unnamed. 9, 10, Molinard; Denby Pottery, Toomey, Arphot. Industry: tropical screen, P. Pitt; light fitting, J. R. Pantlin.

THE ARCHITECTURAL REVIEW



The Cover contrasts the foliate ironwork of a doomed structure against the foliage among which it stands. The doomed structure is the suspension bridge in St. James's Park, soon to be demolished after a century of picturesque service. The foliate ironwork exemplifies the principles of ornament expounded by the designer of its decoration, Matthew Digby Wyatt, converting the lightness and thinness of the natural growth to a broader and flatter form in keeping with the nature of the material. The bridge is discussed in terms of history, structure and scenery, on page 334.

291 Marginalia

294 Frontispiece

295 St Paul's Whatever decisions are finally made about the rebuilding of the area around St. Paul's Cathedral, they have now become of the most acute importance for the immediate future of the rebuilding of the City, and their repercussions will extend far in time and space. Not only is the Cathedral an object of popular interest, symbolically important as an emblem of wartime resistance and post-war rebuilding, but the area around it has now become the battleground of two opposed and irreconcilable attitudes toward town-planning—the Grand Manner, and the Picturesque. A condition of crisis has been precipitated by Sir William Holford's announcement of his inability to produce, on the restricted area available, the kind of grand, geometricizing plan expected in some quarters, and his firm conviction that an informal and picturesque layout would be better adapted to the site, and offer a better foil to the church itself. He has embodied these views in a model which demonstrates his adherence to the English tradition of picturesque planning, exploiting variety of scale and pattern, surprise, concealment, courtyards and squares, instead of vistas and regularity. The model has been greeted with an impressive unanimity of approval both within

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the architectural profession and without, the only opposition coming from a few adherents of the Grand Manner. The Minister has not yet given his views, but he is now faced by what may prove to be the most influential town-planning decision of the post-war years.

299 Bank of England Printing Works, Debden: Architects, Easton and Robertson

308 Dereliction: 2 by Kenneth Browne

In the second of his articles on dereliction, Mr. Browne considers the situation in the Black Country, where more than one acre in eight is derelict, but where the techniques of reclamation with earth-moving machinery are better understood, since longer used, than in other parts of the country. By virtue of Ministerial resistance to the grabbing of usable agricultural land for housing, and a regional planning officer who is both an expert and an enthusiast for mechanized earth shifting, reclamation is becoming the rule, almost, in the Black Country. But what is done with the reclaimed areas is open to debate. They could have been used to introduce a landscape contrast to the industrial scene, and to re-define the vanishing boundaries between town and town, as was recommended in the West Midland Plan and in the preceding book, *Conurbation*. But this would require an over-all plan, such as the area does not yet have, and some resistance to the politically and financially attractive practice of using every acre of reclaimed land for housing. This tends to result, not in the redefinition of boundaries, but their smudging over with low-density urban sprawl, making Subtopia, instead of other Edens among the satanic mills. The area needs a positive landscaping programme, following such precedents as the transformation of the Wren's Nest, if it is to be as rich in human values as it is in industrial ones.

316 Buildings in Hong Kong: Architect, R. Gordon Brown

326 James Adam and the Houses of Parliament by John Fleming

As the Palladians' dream of realizing Inigo Jones's Whitehall designs began to fade, the dream of a new Houses of Parliament took its place. Kent had such a design in hand in 1732, and the dream was passed on to the next generation, that of the pioneer neo-Classicalists. That James Adam had projected such a building was known, but recently discovered letters among the Penicuik papers—discussed here by Mr. Fleming for the first time—now throw light on his manner of approaching the problem, and the kind of building he envisaged. References to the Parliament House design run through the correspondence

from July, 1760, through 1761, and the following year as well. They show James Adam pondering such problems as the need for a members' coffee room in one letter, and the psychological effects of architectural forms in another. These letters can be linked with a body of drawings and sketches, some in his own hand, some by those of his professional assistants and teachers, and enable a positive identification of the sitter in a portrait by Batsoni to be made, since the subject's left arm rests on just such a capital as James Adam had described as 'for the portico of my great project.' However, the great project came to naught, James was soon absorbed into the business of the Adam office on his return, and the project remains, in Mr. Fleming's words, a first year student's exhibition project, however interesting the light it sheds on the origins of neo-Classicism.

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THE ARCHITECTURAL REVIEW

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FIVE SHILLINGS



Sir William Holford's plan for the precinct of St. Paul's is described in the article below as the first instance of a bold imaginative application of the principles of traditional English landscape planning to the problems of a modern city. The complex character of the subtly related spaces with which the cathedral is surrounded is shown in the two views of the model opposite. The viewpoints are indicated on the sketch plan, the tall block in the foreground being that which adjoins the northernmost arrow on the plan.

The Editors

ST. PAUL'S

Every so often—perhaps once or twice in a generation—there arises an architectural question in which some fundamental issue of principle is involved, so far-reaching in its significance that essential future progress may be said to depend on that particular question being answered in the right way. One such question is how the surroundings of St. Paul's cathedral are to be rebuilt. Here two planning principles are opposed, and here is the ground on which the battle between them may perhaps be fought out once and for all.

The St. Paul's precinct is a well-chosen battle-ground for the settling of differences of this importance because on the subject of St. Paul's the public's emotions are already engaged—and how difficult it is ordinarily to engage even the British public's interest, let alone its emotions, when it comes to matters of architecture. But in St. Paul's we have an exception. In the same way that the cathedral became, during the war, a symbol of London's survival after night upon night of bombing, it has become in peace-time, as the slow process of rebuilding has gone forward, the symbol of the nation's anxiety that, in spite of economic and procedural difficulties, the City Corporation should not fail to put in hand some boldly conceived and far-reaching improvements to stand on the credit side of the ledger whose debit side is represented by London's war-time losses.

The public therefore cares that the right thing, as distinct from the merely expedient thing, should be done; but it is bewildered by the opposed opinions that have greeted Sir William Holford's plan. This is because the issue of principle that lies behind the controversy is not understood; yet it is relatively simple. In the history of European town-planning two influences have been at work: on the one hand the monumental tradition—sometimes called the Beaux Arts tradition—associated especially with the French and culminating in the Grand Manner of Louis XIV, which superimposes on everything a formal, symmetrical pattern; and on the other hand the picturesque tradition, cultivated in England in the eighteenth century and symbolizing all the qualities the English then had in mind when they gave their allegiance to freedom and liberty in opposition to the absolutism and the dictatorship of the French.

This picturesque tradition, based on the exploitation of the *genius loci* and enriched

by such devices as concealment and surprise and by subtleties of planning so informal that they appeared to be the products of accident, reached its culmination in the landscape gardening movement. But in our time it has become evident that the English inability to design towns during the whole century that has elapsed since they were transformed into an urban race, has been due to their failure to adapt this picturesque principle—so exactly suited to their genius—to the purposes of urban landscaping. This Sir William Holford has at last done, boldly and imaginatively, at St. Paul's.

His critics consist of the very few who, by a process of reasoning, have convinced themselves that the formal, classical mode of planning is the right thing for London, and the many who had given no thought to principles nor looked with discerning eyes at St. Paul's, but expected him to produce something in the Grand Manner because they associate it with the settings of important public buildings. They were naturally disappointed when nothing of this kind was forthcoming.

How these two mutually exclusive traditions find themselves face to face in the precinct of St. Paul's can best be explained by giving some account of the events that led up to the presentation of Sir William Holford's plan. At the beginning of 1955, Mr. Duncan Sandys, in his capacity as Minister of Housing and Local Government, called for modifications to the County of London development plan, in so far as the area round St. Paul's was concerned, in the belief that an opportunity was being lost to provide a worthy setting for the cathedral. His decision was welcomed, because there had been much public despondency about the half-hearted replanning and the piecemeal rebuilding that had gone on elsewhere in the City, and the City Corporation forthwith appointed Sir William Holford to prepare a design for the whole precinct.

It was arranged that he should be guided in the early stages by a committee of three, consisting of the Minister himself and the chairmen of the town-planning committees of the City Corporation and the London County Council. It was obvious to Sir William Holford from the beginning that many people, officially and unofficially concerned with the project for St. Paul's, had strong preconceived views in favour of a treatment in the Grand Manner; the President of the Royal Academy was particularly active in putting forward his ideas for a precinct redesigned on this principle.

Sir William, however, with his profound knowledge of the London landscape, which he had studied over many years, was aware of the danger of jumping to superficially attractive conclusions and suspected that an answer of a very different kind was called for. But, keeping an open mind, he began by experimenting with a formal, geometrical layout and prepared a scheme in which a symmetrical forecourt at the west end of the cathedral was enclosed by an imposing semi-circular colonnade. This he showed to the Minister, but explained at the same time his reasons for the conclusion—which he had come to while working on this design—that such a treatment was wrong in principle.

These reasons cannot be better expressed than in the words he himself used to explain them in his report, which was issued with the model of his final design in March of this year. The first, symmetrical forecourt design is illustrated in the report, and of it Sir William Holford says: 'It offered no contrast to the cathedral; it was too large for the site; but not large enough to make a really monumental open space, such as, for example, the Piazza in front of St. Mark's in Venice. Except as a screen and a covered pedestrian way, it had no function, and would thus be very difficult for a contemporary architect to design in detail. Most important of all, the geometrical curve looked uncomfortable and

pretentious in front of the very square lines and angles of the western half of the cathedral, and even more so when seen with the drum and dome. . . . a strong symmetrical half-circle in the forecourt seems to rival the drum and helps to lessen the dominance of the great central feature.' Elsewhere he says: 'St. Paul's could be opened up on all sides . . . but any changes which tended to drain life away from the precinct instead of bringing it back could be very much to its eventual disadvantage.'

No compromise is possible on such questions of principle, and Sir William, being convinced, in spite of the pressure that was brought on him, that the irregular, anti-classical conception was the right one in the circumstances, pursued this idea indefatigably and created from it a wonderfully imaginative piece of urban landscaping, following traditional English principles. To quote again his own persuasive words: 'There is no major open space or piazza which introduces the building; it is either seen rising out of a picturesque conglomeration of lower buildings, itself only partly exposed (as in the well-known view from Fleet Street), or it emerges suddenly as one turns a corner into Godliman Street, or Dean's Court or Ave Maria Lane or Paternoster Row, filling the middle distance with its black and white masonry. The right principle to adopt in designing a layout for such a building must surely be to improve and increase the variety of viewpoints for those who move about the precinct, whether on foot or on top of a bus, and to achieve a sense of enclosure not by building a great wall or screen all round the cathedral (which would reduce its scale and lessen its interest), but by creating a whole series of smaller and related open spaces, each getting its character from some aspect of the building and using it to close the view from its approaches. Although the precinct has to be threaded through by pedestrian and carriage ways, there should be an attempt to give a sense of enclosure and composition to the forecourt, to Paternoster Square, to the shopping centre and to the tree-planted space round St. Paul's Cross.'

The chief elements in his composition are the varied skyline, incorporating views between his newly placed buildings of the trees, towers and domes in which the area is already rich, and the carefully related spaces between the buildings, forming an intricately interconnected sequence of, mostly pedestrian, courts and squares. The buildings themselves are frankly commercial as to purpose, as they always have been round St. Paul's. For St. Paul's is London's parish church, round the base of which the daily life of the capital traditionally ebbs and flows. Another merit of Sir William Holford's plan is that it can be put into operation without any need to expel these commercial comings and goings from the cathedral precincts. Unlike the classical type of plan, which looks nothing until it is complete, the Holford plan can proceed by stages, each of which will bring about a visible improvement in the shapeliness and amenities of London.

The plan was made public in March, and naturally received much attention in the Press. The reaction, on the whole, was highly favourable and the good qualities of the scheme—which by their nature are particularly difficult to expound—seemed to be well understood. A sympathetic analysis appeared in *The Times* and in the *Manchester Guardian*, an unusually telling appreciation by Robert Furneaux Jordan appeared in the *Observer*. John Summerson wrote in praise of it in the *New Statesman* and Christopher Hussey in *Country Life*. His article was supported by a leader in which the parallel between Sir William Holford's style of urban planning and the eighteenth-century landscape tradition was explicitly referred to. Even the *Evening Standard*, which does not usually show good judgment about this kind of question, printed a column of praise.

The only dissentient voices of any potency were raised in the leader columns of *The Times*, and the *Daily Telegraph*, where an article on the news pages by John Betjeman, most sympathetic to Sir William Holford's aims and achievements, was flatly contradicted in a fierce attack on the whole design. But the *Daily Telegraph* is known to have close contacts with the President of the Royal Academy, whose voice was also raised in dislike of the scheme in an interview in *The Times*. He declared that the French would not have designed it thus, thereby merely underlining the essential Englishness of Sir William Holford's conception.

Outside the Press, opinion was equally favourable; for example when Walter Gropius visited England in April to receive the Royal Gold Medal he expressed strong approval of the plan and what it stood for, and when, later in the same month, the plan was debated in the House of Lords the speeches were almost exclusively in its favour—which is of special significance because they represented responsible, but wholly disinterested, lay opinion. It is true that a group of Members of Parliament tabled a motion calling on the Minister not to approve the Holford proposals (and were answered soon afterwards by another motion, tabled by another group, in exactly the opposite sense), but this—the first motion—gave no sign of being founded on anything but prejudice and ignorance and only produced the reaction in most people that it should be part of the wisdom of the politician to know when to be guided by the experts.

The Minister is no doubt aware himself that this is where wisdom lies. At the time of writing he has not made known his views, but he showed his far-sightedness when he called for a worthier setting for St. Paul's in the first place. It only remains for him to show now that he is aware that this is too important an issue to leave to personal whim or prejudice, and that the weight of informed and expert opinion in favour of the plan is his proper guide to action.

The plan is now with the City Corporation for consideration. It is to be hoped that both the City and the Government will add their support to the approval already given by the experts and the public, so that all can at last agree on what is to be done at St. Paul's and proceed with the doing of it. That it is proposed to do it in this particular way is an encouraging indication that England is at last beginning to rediscover her lost planning traditions. If the Holford plan is rejected, or is destroyed by compromise, this promise of a revival of the art of town building in England will be set back half a century.

BANK OF ENGLAND PRINTING WORKS

ARCHITECTS

EASTON AND ROBERTSON

1. the main entrance of the administration section, which occupies the centre of the south front. The closely spaced glazing bars of the ground-floor windows were a security requirement. The brickwork is a brindled red. The reinforced concrete canopy has an under-surface of teak. The windows above are framed in Portland stone.



These Printing Works are at Loughton, Essex, on the Debden Industrial Estate at the edge of Epping Forest, 12 stations' distance from the Bank on the Central Line railway.

Since 1945, the number of Bank of England notes in circulation has increased by about 50 per cent; these notes are printed by the Bank itself, whose printing works at Old Street, E.C.1 (formerly St. Luke's Hospital), have for some years been inadequate to deal with the volume of work. As a first step the Bank set up a planning section who, taking into account the domiciles



2 The printing works from the air. On the left, only half in the picture, is the canteen block. In the centre are the curved roofs of the large and small production halls, with the administration section alongside them.

of its present staff, the availability of new printing labour and the need for as short a distance as possible between the Bank's head office and the printing works, decided on the NNE segment of London as the most suitable district for the new works. The architects were approached, and Ove Arup and Partners were called in as consulting structural engineers.

The site, which is leased to the Bank by the LCC, is about a quarter of a mile long by 200 yards wide, and adjoining the south side of the railway, east of Debden station. The main aim of the new works will be to print banknotes more efficiently and more cheaply; the time spent on moving paper in the new hall will be half the time taken at St. Luke's. All the processes of engraving, colouring, overprinting and checking will be done in a continuous stream, the banknote paper entering at the east end and each process of printing taking it westwards. The new works will print, besides banknotes, papers and documents for the Bank's internal use and dividend warrants.

The planning is based mainly upon the productive flow for the printing processes, the main machinery hall providing an uninterrupted space of 800 feet in length by 125 feet in clear span width, with smaller adjoining halls and sorting rooms adjacent. There is provision for possible expansion along the uninterrupted north flank of the building. The clients required cleanliness, economical maintenance, concealment of services plus accessibility, and good even lighting, both natural and artificial, together with floor spaces for plant as far as possible

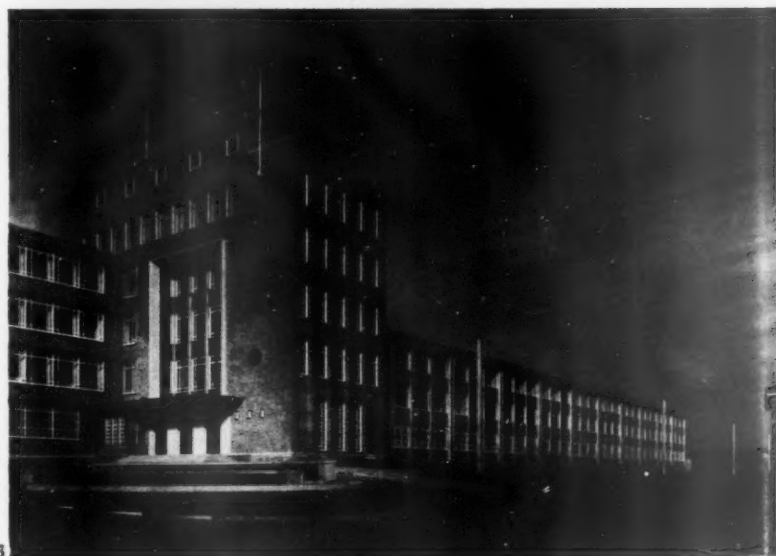
3



4



5



Above, the south front of the building. 3, the small production hall, with exposed concrete arch ribs. The whiteness of the roof is due to the spar with which the felting is covered for thermal reasons. Beyond the production hall is the four-storey office block. 4, a closer view of this block, looking towards the administration entrance. The south windows have continuous glazing. 5, the central feature of the south front, in which is the main administration entrance (see previous page). The recessed window panel over the entrance is faced with teak and framed in Portland stone. The dark spot beside it is a 'Britannia' plaque in bronze. On the right is the three-storey printing, workshop and chemists' section. This has structural members of reinforced concrete exposed and left untreated, with brick panels between. In front can be seen the detached concrete standards which provide site illumination.

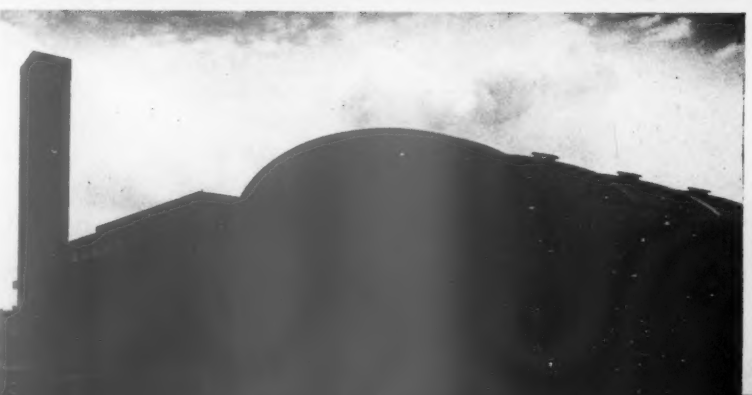
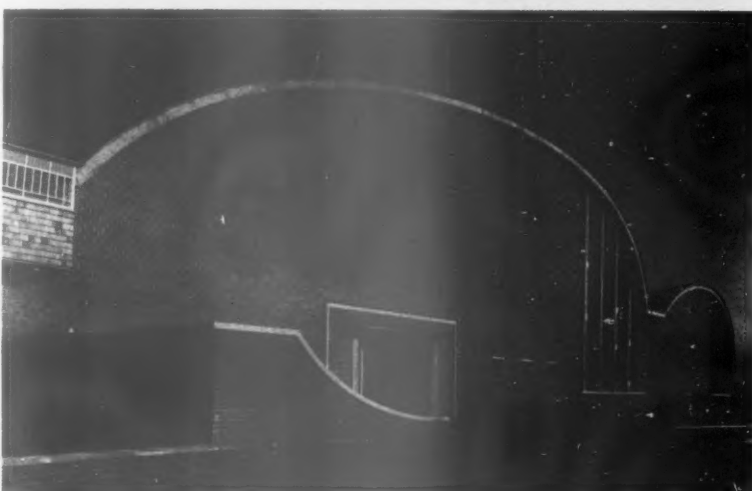
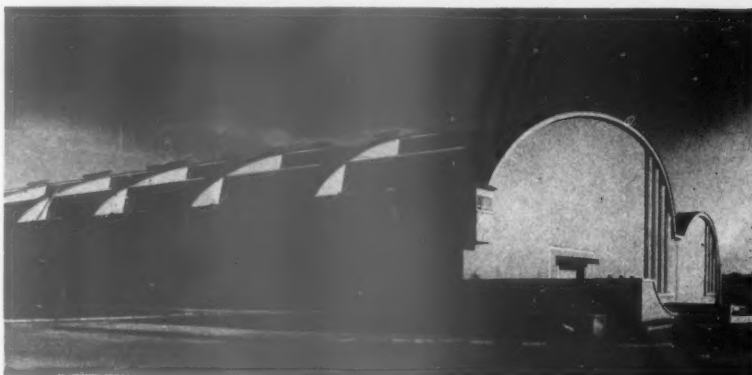
uninterrupted by columns. A reinforced concrete structure was decided upon, with asymmetrical double concrete arches spanning the main hall and allowing for ducting and service space between the dual trusses. The building is mainly on two levels on account of the sloping site, with four upper floors of offices and three of general services on the south front. The main entrance, with the principals' offices above, lies between these two blocks. The canteen, also of reinforced concrete, with shell-type roofing, is a separate adjoining building linked to the factory by a subway. The exterior of this building, as of the printing works proper, is in facing brick with some of the basic structural elements exposed. The use of Portland stone has been limited to copings and a few window surrounds.

The main production hall is constructed with arched ribs, precast in segments, spanning the width, and with in-situ northlight shells spanning longitudinally between the ribs, the whole forming a sweeping asymmetrical curve. The shape was designed to enable the tiers of shell northlights to continue well beyond the centre line of the hall, and so to give more daylighting than is possible with symmetrically built construction. A security gallery runs the full length on either side—a trough shaped structure of which the base is formed by a beam spanning between the ribs and the sides by precast units. The arch ribs, which individually are only 9 in. thick, are constructed in pairs, with a 3 ft. 6 in. gap between them which accommodates ventilation, heating, electrical and plumbing services. Ducts for the cables are formed by rubber cores. The arches are each formed of two base sections cast in situ, and eleven segments precast in a casting yard set up on the site. The whole arch is prestressed together on the Freyssinet system, which is necessitated chiefly by the extreme slenderness of the arch members.

The hall was constructed a bay at a time, two arch ribs and their intermediate northlight shells being dealt with as one unit. For erecting the precast arch segments and for casting the in-situ shells, an articulated steel gantry was used on which the formwork was set up. The complete shuttering was raised into position when required for casting, and after the concrete of the shells had hardened, the whole assembly of gantry and formwork could be lowered, to be moved on to the next bay. The formwork used for the in-situ arch legs and the base of the galleries was prefabricated in large units and handled by the derrick; the fluted front of the gallery was formed with precast units cast against teak formwork to ensure the highest possible finish. The formmarks have been designed, whether in metal or plywood forms, to be in sympathy with the modular rhythm of the structure. The only painted parts are the soffit of the arches, in pale primrose, and the front of the security gallery, in pale sea green. Window surrounds are white, and the tiled foreman's box, the facing brick of the infilling walls and the dado at the west end of the hall, ochre: the upper walls in this section are primrose yellow. Floor are generally wood block, with special hardwood strips in the line of heavy traffic.

The general printing hall, adjoining the main production hall, is roofed by a series of northlight shells, cantilevered, four a side, from a central double row of columns. To allow for expansion and contraction caused

Below, the main production halls, 6, from the north-west, showing the system of roof-lighting and the shingle-faced wall of the inspection gallery immediately below the curve of the roof. 7, the double curve of the west end of the two production halls. 8, the works entrance at the west end in its low-level courtyard. 9, the east end, with delivery yard and boiler-house.



[continued on page 305]



10

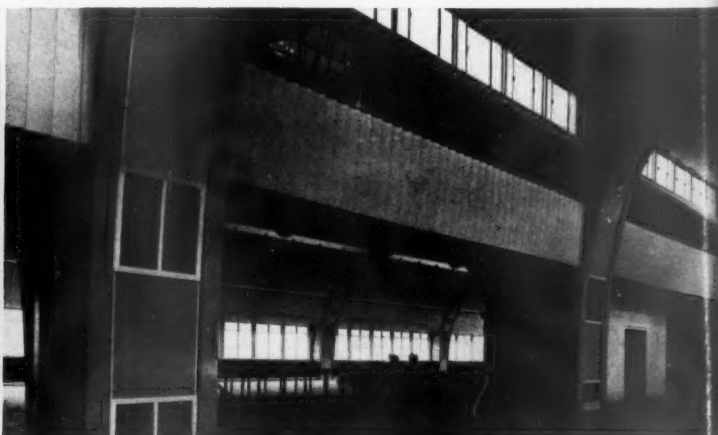
BANK OF ENGLAND PRINTING WORKS, DEBDEN

The most spectacular, as well as the most important, part of the building is the main production hall, occupying almost the entire length of the north side. Its exterior and brick gable end are shown on the preceding page. 10, the interior before the installation of machinery, with asymmetrically curved concrete ribs between which are vertical north lights. The low screens are to separate the working divisions and are removable. The floor is

of wood blocks. All round the hall is a continuous security gallery from which operations at the machines can be watched. It is reached by a number of internal staircases. 12, a detail of the security gallery. The wall-surface below the windows is moulded concrete. Beneath the gallery can be seen the small production hall, of which the interior is shown in 11. The roof has a similar arched rib construction to that of the large hall.



11



12

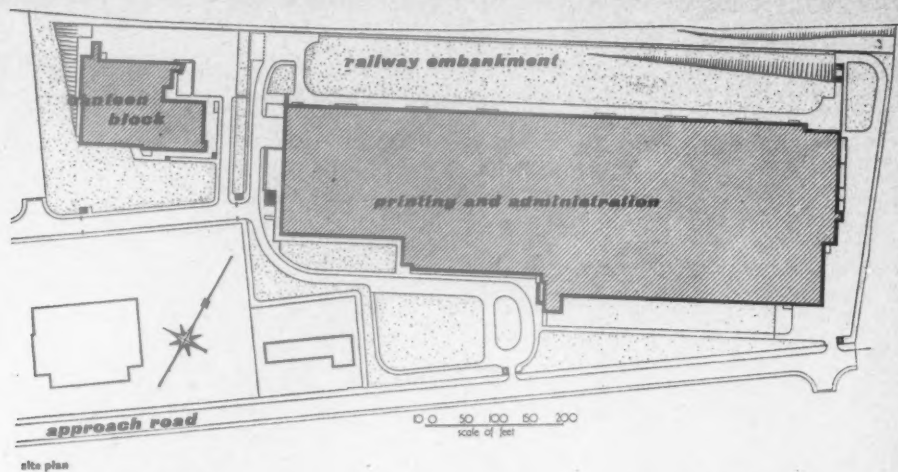


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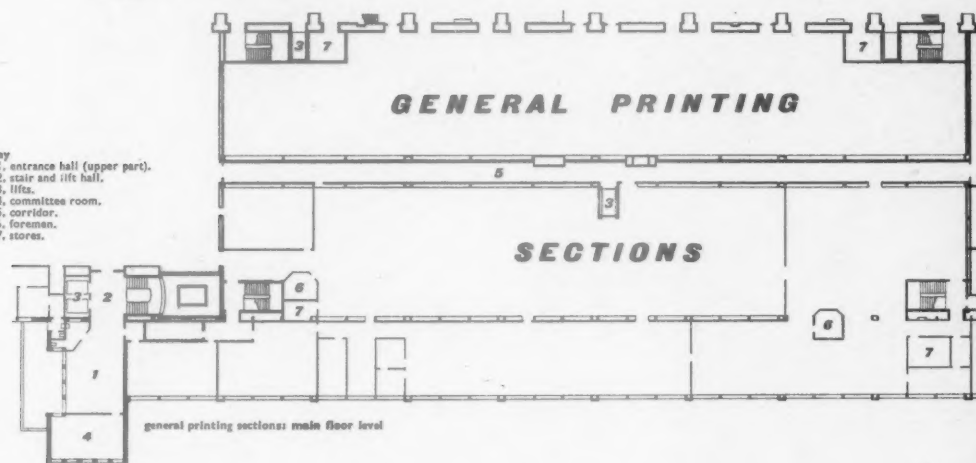
small

section

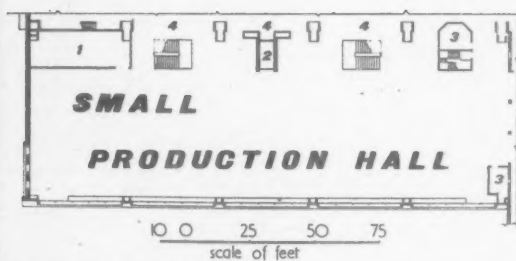
section



- key
- 1, entrance hall (upper part).
 - 2, stair and lift hall.
 - 3, lifts.
 - 4, committee room.
 - 5, corridor.
 - 6, foreman.
 - 7, stores.

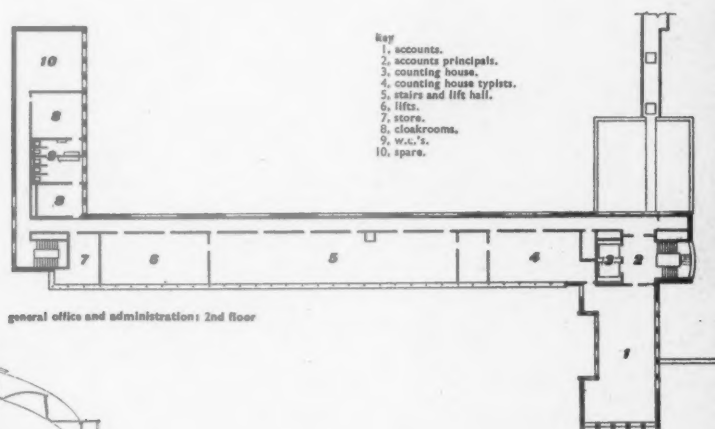


- key
- 1, baling room.
 - 2, lift.
 - 3, foreman.

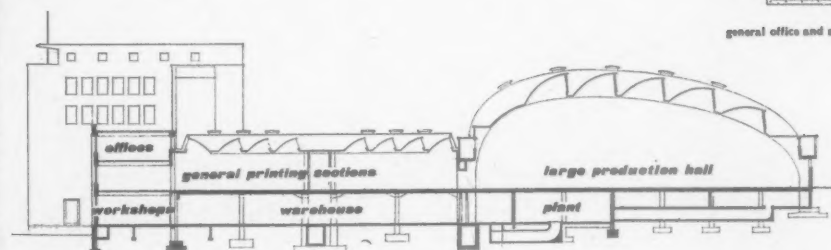


small production hall: main floor level

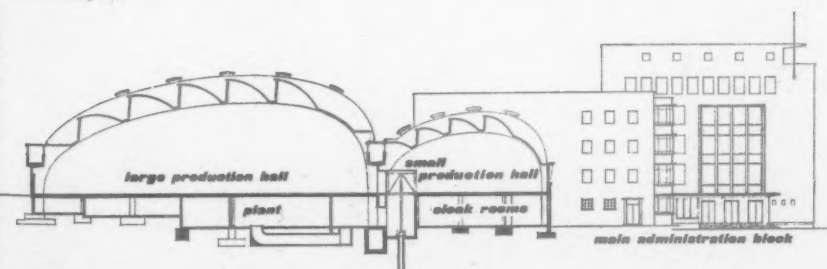
- key
- 1, accounts.
 - 2, accounts principals.
 - 3, counting house.
 - 4, counting house typists.
 - 5, stairs and lift hall.
 - 6, lifts.
 - 7, store.
 - 8, cloakrooms.
 - 9, W.C.'s.
 - 10, spare.



general office and administration: 2nd floor

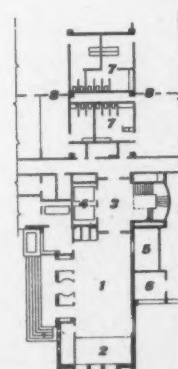


section looking west

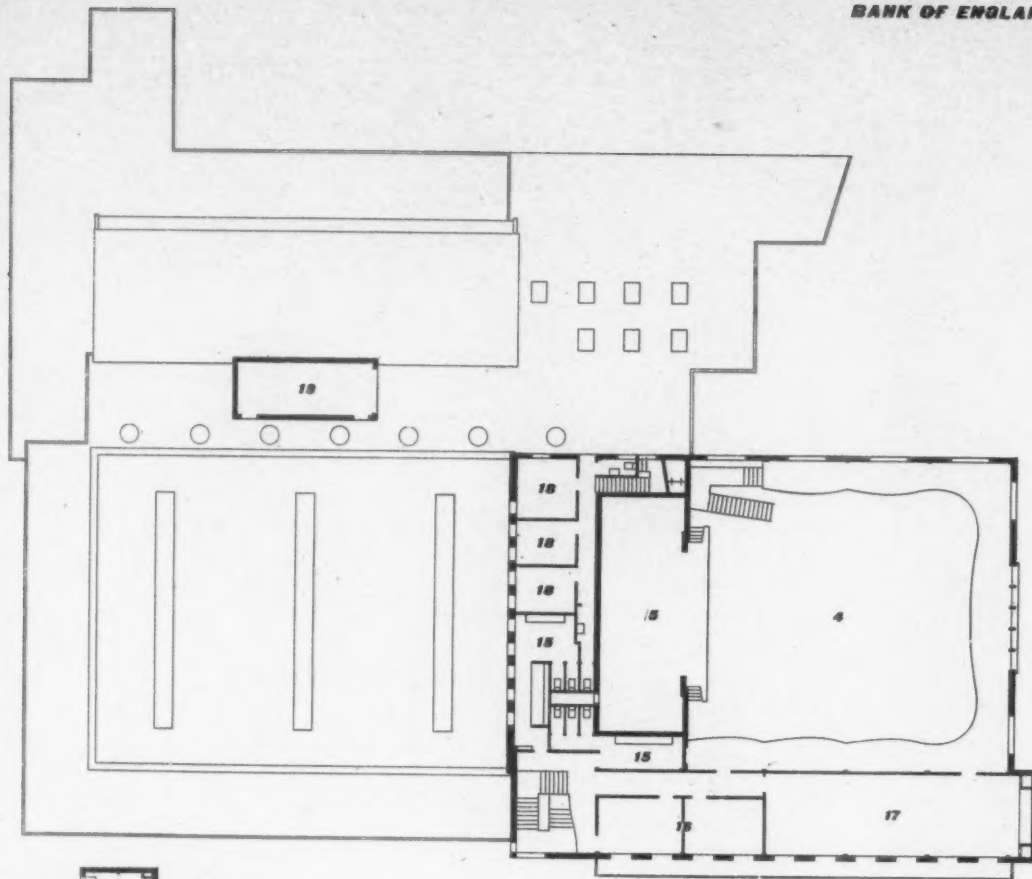


section looking east

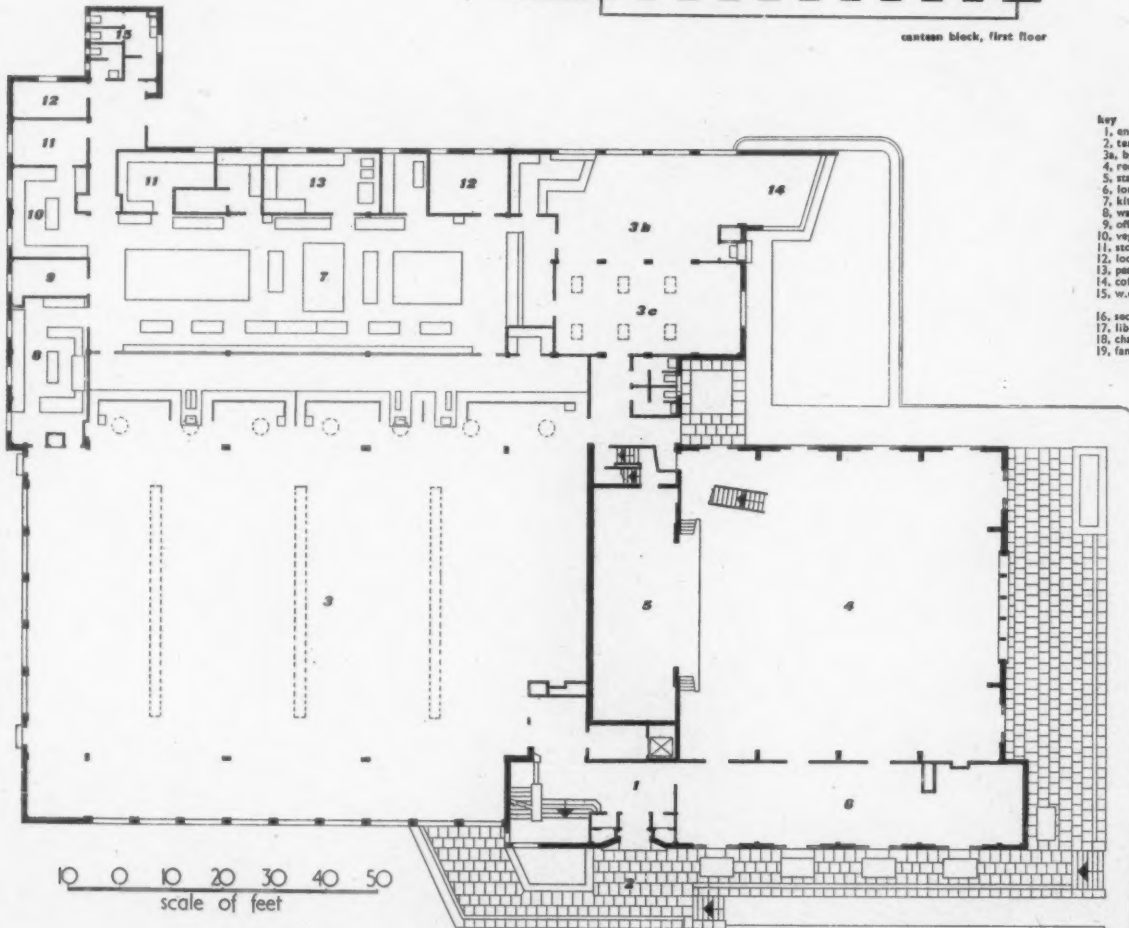
- key
- 1, entrance hall.
 - 2, visitors and waiting room.
 - 3, stair and lift hall.
 - 4, lifts.
 - 5, enquires.
 - 6, store and gas meter.
 - 7, W.C.'s.
 - 8, cloakrooms.



main administration block: ground floor



canteen block, first floor



canteen block, ground floor.

- key
- 1. entrance hall.
 - 2. terrace.
 - 3a, b, c. dining rooms 1, 2, 3.
 - 4. recreation hall.
 - 5. stage.
 - 6. lounge and tea room.
 - 7. kitchen.
 - 8. wash-up.
 - 9. office.
 - 10. vegetable preparation.
 - 11. stores.
 - 12. locker rooms.
 - 13. pastry.
 - 14. coffee bay.
 - 15. w.c.'s.
 - 16. secretaries of organization.
 - 17. library.
 - 18. changing rooms.
 - 19. fan room.



[continued from page 301]

by temperature changes, the edges of the cantilever roof are not structurally connected either side. This hall is divided into four independent bays, the roof of each being constructed with four prestressed concrete beams carried on the central pairs of columns with a cantilever of 45 ft. on either side. The precast concrete shells span between the beams, four shells side by side being carried on each cantilever arm. The hall is divided, longitudinally, by metal partitions, and the brick infilling walls are spray-painted with a cement glaze.

The basement below the printing hall is constructed on the 'mushroom' column and flat slab principle, with two central rows of columns corresponding to those in the hall above. The multi-storey administration blocks are reinforced concrete-framed. The reinforced concrete peripheral columns on the south block carry 21 in. reinforced concrete edge beams, and these in turn carry the floor of precast units, which are inverted L-shaped, grooved to fit on to one another, forming a floor of rib beams and slabs. A false ceiling below the ribs enables all services to be concealed. The main frontal columns were precast on the site. In the canteen block the kitchen is roofed by a single northlight shell spanning the full length of the building. The dining hall is roofed with three cylindrical shells spanning the width. The stiffening beams at each end rise above the line of the shell, and are pierced with large windows; the shells themselves also have a strip of central glazing. The recreation room, which is 63 ft. long by 60 ft. wide, is spanned in the 60 ft. direction by three shells. The two outer ones are simple cylindrical shells, 15 ft. wide, and designed to a radius of 8 ft. That in the centre, however, consists of a central cylindrical section designed to a radius of 24 ft. 7½ in., with on either side a reverse curved shell with an 8 ft. radius.

The fuel for the heating and ventilation plant is heavy fuel oil or coal tar. Mercury vapour, tungsten, and fluorescent lighting systems are used together or separately in production and other spaces.

13, the kitchen and service side of the canteen block, with continuous glazing on the north side of the shell roof, to light the kitchen.



Above, the canteen block, a separate building to the west of the production halls (see site plan, page 303) 14, the south side. 15, the entrance hall looking towards the tea-room. 16, the free-standing reinforced concrete stair leading to the gallery of the recreation hall. 17, inside the canteen. The shell roof, in three segmental bays, is finished with an asbestos spray to deaden sound. 18, the service counter in the canteen. On the right are screens opening to the kitchen.

BANK OF ENGLAND PRINTING WORKS, DEBDEN



19



20

Inside the administration block. 19, the main staircase. It has polished metal standards and a white-painted guard-rail on the external face. 20, the entrance hall, with central open well (see plan on page 303), round which is the committee-room gallery. The ground-floor walls are panelled in cedar. The floor has cork linoleum in the centre and a travertine margin.

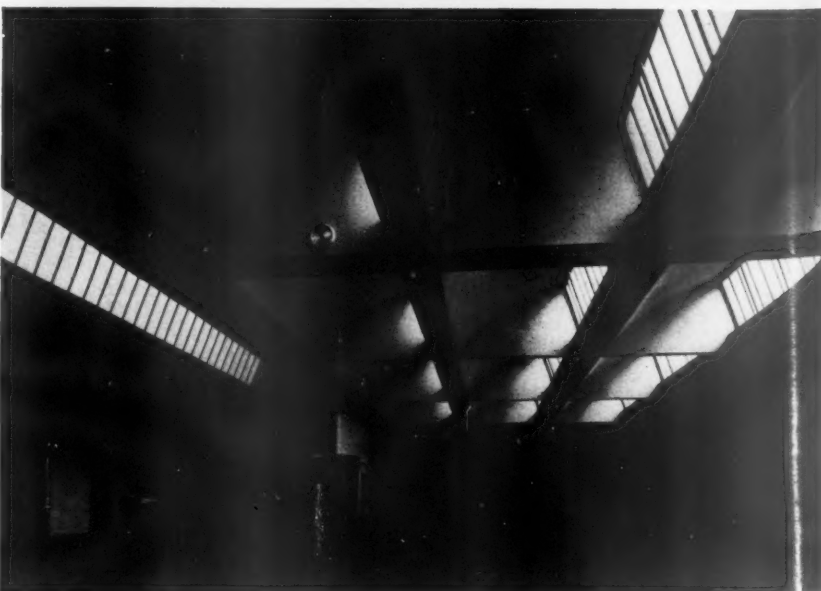
Above, some working-area interiors. 21, the main works entrance on the lower ground floor, with control turnstiles. 22, typical working space in the works section, with suspended ceilings and movable cross-partitions. 23, the general printing section showing the north-light roof, an independent construction cantilevered out from the columns framing a corridor on the right.



21



22



23



24



25

24, the service corridor which runs beneath the full length of the production area, giving access to services, lavatories, etc. The lower part of the walls is in glazed brick. 25, looking down the corridor from the staff entrance-hall which has as decoration (right) a photo-mural of Westminster.



26, looking down into the boiler-house from the gallery, showing the vertical boilers. It has a special ceiling with thermal and acoustic insulation.

With few exceptions, the built-up areas of the Black Country are separated only by industrial dereliction (shown green). The basic landscape problem of the area is that reclamation usually makes room only for more housing, and the gaps are filled with continuous building.

← built up area **A**

← built up area **B**

*new housing estate
on reclaimed land*

canal

← built up area **C**



Kenneth Browne

In the first of his articles on Dereliction, Kenneth Browne showed a picture of creative land-reclamation getting under way in the wasted areas of Lancashire. In this second article he deals with the Black Country, an area which pioneered the reclamation of industrial badlands. But it is an area which has special landscaping problems because of its very high concentration of men and manufactures—problems which need to be solved if there is to come that day to which Lewis Mumford looked forward ‘when Birmingham and the Black Country will be as solvent in human terms as they have been, in the past, in industrial and financial terms.’†*

Dereliction: 2

Smoke-stained, slum-ridden, prosperous, congested, the 140-sq. mile Midland industrial hive known as the Black Country presents one of the most difficult planning problems in Britain.

It consists of a score of close-packed industrial towns varying greatly in size yet each with its nucleus of individual character. These towns often run haphazardly together with no visual demarcation of where they begin or end, and are only separated, where separated at all, by great stretches of derelict land (9,300 acres of it in 1945),‡ barren and cratered like a battlefield—see opposite. This is a landscape of slag banks and spoil heaps, quarries and flooded subsidence flashes—landscape rendered unusable over the last 150 years by coal, ironstone and fireclay mining, iron smelting and brick-making. It is a landscape whose very contours have been completely changed by industry and in addition it is crisscrossed by a maze of canals and railways which thread through the densely built-up areas dividing the whole into innumerable small pieces of development. In this, the birthplace of the Industrial Revolution, the siting of everything was determined by immediate convenience and quick commercial returns, and in consequence houses and factories are jumbled together in a landscape of £ s. d. Although most of the heavy industries which caused the dereliction have now moved out of the area, with the exhaustion of the rich shallow coal seam, this is still the centre of the country's wealth, with a vast number of inter-dependent industries. It is a monster that works well but under extreme difficulties, for most of the factories are too small and, being mixed with the housing, unable to expand. To sort this out is a most difficult task, especially as any changes must be made ‘with the steam up’—a ready-made excuse for doing nothing.

One result of an overwhelming concentration on industry in the Black Country is that it has not developed cultural and recreational amenities in proportion to its population, and for many years the lack of attractions, particularly open space, in the central areas

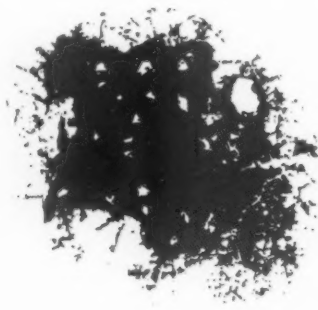
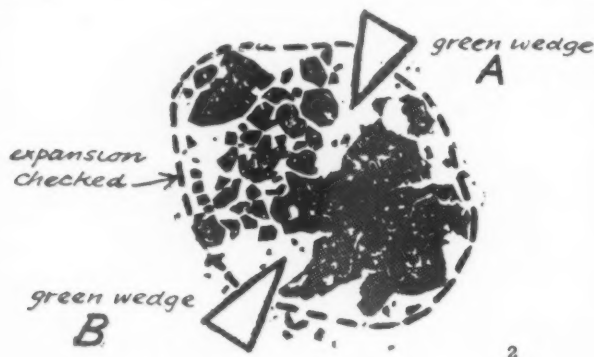
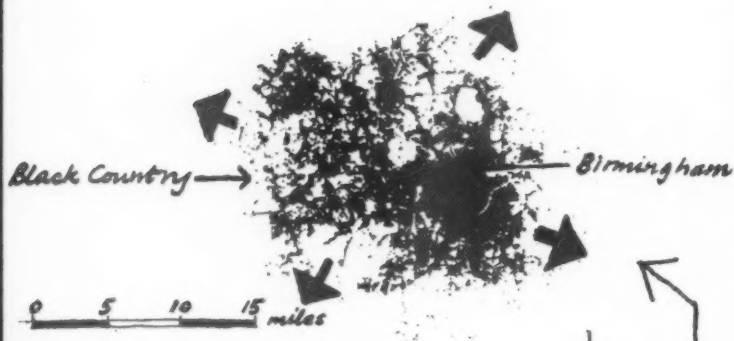
* AR, Nov., 1955.

† Foreword to *Conurbation* (a survey of Birmingham and the Black Country), published 1948 by the Architectural Press for the West Midland Group.

‡ More than 1 acre in every 10. Coseley, for example, out of a total acreage of 3,290 acres had 2,000 acres of dereliction.

led to a 'flight to the fringes' by all who could afford it. The area was expanding like a balloon and eating deep into the surrounding countryside, 1 and 4.

Fortunately for the whole country, the need for drastic action to halt this spread was realized after the last war by the Ministry of Town and Country Planning. Though many local authorities, starved of suitable building land, were only too willing to buy up agricultural land for their new housing estates, the Ministry, to its credit, refused to 'clear' such schemes. As a result, the local authorities were forced to look elsewhere for land, and reclamation of the derelict land on their doorsteps provided the only answer.



1, above, shows the crazy, haphazard pattern of the pre-war Black Country. Nearly all open space (white) between built-up areas (black) is derelict land. Everyone who can, buys a house outside the industrial morass and the area expands fast, despoiling the surrounding countryside, 4.

2 shows, diagrammatically, the pattern advocated in 'Conurbation': expansion checked and town boundaries contracted to give legible units separated by a green setting of reclaimed dereliction. Large existing green wedges, A and B, are safeguarded and enlarged.

3, the present danger: expansion checked but nearly all, reclaimed derelict land built over and green wedges eaten away—result, complete consolidation.

This, however, posed engineering problems which hitherto had been thought insurmountable. Though reclamation was no new thing here, prior to 1939 it had been tackled almost entirely by hand, mostly as labour relief, and recovery of the bigger sites had been dismissed as impossible. However, as a result of the war, great strides had been made in the technique of mechanical earth-shifting, and with machines such as the elevating grader, which could move 500-700 tons an hour, reclamation was a much better proposition. Fortunately for the local authorities, the Regional planning officer, Lieut.-Col. J. R. Oxenham, was an expert in the use of this equipment and a great enthusiast, and he geared them up to tackle their land reclamation problems using the latest machinery and co-ordinating all refuse dumping to levelling. His efforts were so successful that vast schemes of land recovery were undertaken involving such obstacles as the filling of marl holes 400 feet deep and the moving of thousands of tons of shale and slag. As a result councils were enabled to set a fast pace with their housing programmes and now, instead of their having to be persuaded, reclamation has been developed to the pitch that even private enterprise has found it an economic proposition and is following the councils' lead.

So far, so good, but what of the visual aspect—the Black Country considered as landscape? In 1948 the West Midland Group gave, in *Conurbation*, an excellent survey of Birmingham and the Black Country, a very clear picture of the landscape problems and underlined the essential need from the start for a constructive landscape policy for the area treated as a whole to prevent its complete coagulation by sprawl, 3.

[continued on page 312]



Dereliction

The Black Country, unlike Lancashire, lacks the spectacular conical spoil heaps produced by the modern coalfield.

In the past, the vast quantities of slag and spoil produced were dumped by hand to form a landscape of



marl
hole



spoil
heaps



small hills and hollows. This is further pock marked by huge marl pits 5, formed in the extraction of brick clay and hollowed out by subsidence flashes 6.



BEFORE land reclamation

Typical scenes of dereliction - the landscape cratered like a battlefield and heaped with spoil and slag tips

In this, existing green wedges would be maintained and enlarged by taking advantage of the great stretches of dereliction. They showed that in fact, after reclamation, there would be space in the area to accommodate all the new building required whilst still increasing the amount of public open space. However, this could only happen if there were an *over-all*, plan and by ground view photographs and montages as well as plans they suggested ways of tackling the problem. This book did not set out to provide a final landscape plan, but by its research and presentation to clear the way for the official plan, which in fact was shortly issued by the Ministry of Town and Country Planning.[†] The official plan again emphasized the importance of a positive landscape scheme which would benefit the whole area and pointed out that the derelict land served a good, if

DURING

Reclamation in progress with bulldozers and scrapers. Subsidence filled and spoil tips flattened

unintentional, purpose in that it was a barrier to all-over sprawl and helped to retain the individual character of the various towns; a character of which the inhabitants were proud. In addition, in an area dreadfully short of open space, it provided playgrounds and made the very necessary visual contrast to the tightly built-up areas. The plan recognized that there were great opportunities of converting large areas into a really attractive landscape which would act as a foil, not a mask, to industry. Also underlined was the need to make a 'new heart for the Black Country' by bringing first-class social and recreational facilities into the rotten core. The plan stressed the acute shortage of such facilities in the area and also the lack of open space. It proposed, on a site near Oldbury, a cultural and recreational

AFTER

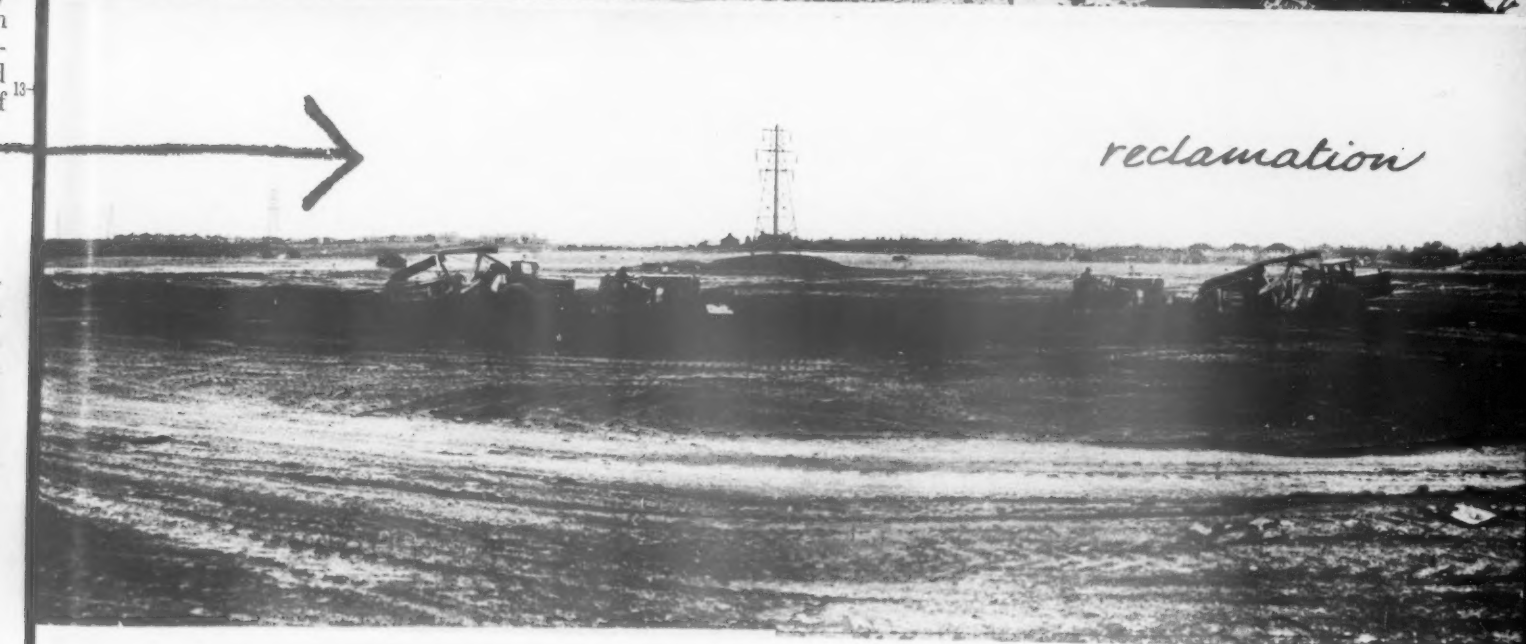
The final effect. The land reclaimed and council semi-dets. jostle into position.

centre rather on the lines of the LCC Crystal Palace scheme which would make an attractive focal point for the whole Black Country.

What in fact, eight years after, has been done? The idea of a 'new heart' did not catch on locally and was abandoned, and in spite of the past examples of successful reclamation for open space, such as the Wren's Nest, 16, once an eyesore, today a beauty spot, and in spite of the ideas put forward by the West Midland Group, there is little sign that this essential need has been grasped and every sign of the whole area being joined together by a sprawl of council

[†] West Midland Plan by Professor Sir Patrick Abercrombie and Herbert Jackson.

[continued on page 315]

*dereliction**reclamation**occupation*

15



16



Reclamation for Open space 1.

The grounds of Dudley Castle and "The Wren's Nest", Dudley were, at one time, eyesores owing to extensive limestone quarrying for blast furnaces. Planted in 1815 by the Earl of Dudley, they are now local beauty spots and act as barriers to sprawl

17



18



19

20
← 21

Reclamation for open space 2.

The sequence of pictures below, 17, 18, 19, shows pre-war reclamation at Bury Hill, Oldbury, where a park (marked P in 10) was formed by grassing and tree planting pit mounds. 17, the view from the park towards the main Birmingham-Wolverhampton road, the lake in the foreground having been formed from an old excavation. 18, the opposite view, showing the landscape dominated by a derelict pit mound which in no way detracts from the scene. 19, however, shows the same view completely ruined by the invasion of a housing estate.

At Wolverhampton (bottom sequence), the East Park, 20 below, was once derelict land and, though proving that plants thrive in shale, is itself unrelated to the landscape and within its symmetrical perimeter, merely turns its back on the surrounding ugliness. Also at Wolverhampton, the West Park, 21 (facing page), was never in fact derelict land, but, save for the municipal ornamental garden, is a fair guide to what could be done to make a green setting out of the dereliction; even the lake could well have been formed from an abandoned marl hole.

continued from page 812]

housing estates, 14. Has everything but absolute utility gone to the wall, and if so why?

To begin with, the essential first step of having an over-all landscape plan, emphasized both in *Conurbation* and in the official plan, was not, through local jealousies, ever taken. In consequence the problems are tackled piecemeal without any over-all picture, and where, as is often the case, a green wedge runs through the territory of several authorities we have the ridiculous position of some trying hard to preserve it whilst others build on it as fast as they can. Secondly, the official five-volume West Midland Plan, issued to all local authorities but not published, fails as a guide to action. Whilst throwing cold water on most of the landscape ideas put forward in *Conurbation* it puts forward few concrete suggestions itself, and is so heavily overlaid with economic jargon as to confuse the issue. Also the dull official, roneoed presentation, the lack of clear directives and the absence of any photographs or drawings to show what things could be like (an essential for discussion), encourage the borough engineer to leave it on the shelf.

Added to this, open space is the one type of surface use which normally yields no financial return, whereas housing figures impress and add to status. Again, *Conurbation* visualized a contraction of existing town boundaries by rebuilding slum property, using up the odd left-over corners and building higher. In fact, the speed with which new housing was required led those responsible for providing it to ignore such suggestions and take the easiest way, which in this case was to master the art of reclaiming derelict land and lay out new estates on that. Yet another reason is that good landscape, something good to look at, cannot be created unless people trained to use their eyes are in responsible positions. The Black Country is particularly backward in this respect, and the landscape which is appearing in place of the dereliction is the landscape of the borough surveyor not the landscape architect. Earth-moving machinery which can transform the shape of the land is a power for good or evil visually. If here it is used to flatten the barrier of dereliction so that subtopia can take over, it is the latter. To excuse the great vistas of semi-dets. which so often replace dereliction we are told that this is the only form of building possible owing to the danger of subsidence. Surely it is unbelievable that architects, were they encouraged to do so, could not find a way round this.

When the visual approach is missing no amount of engineering ingenuity can make up for it. Siting things in the right place economically is planning of a kind, paper planning; but it does not go far enough—it does not and never will provide a humanized landscape. The derelict land presented the opportunity for such a landscape, an opportunity which it would appear is fast being dissipated.



20
← 21

BUILDINGS AT HONG KONG

ARCHITECT

R. GORDON BROWN

Assistant Architect

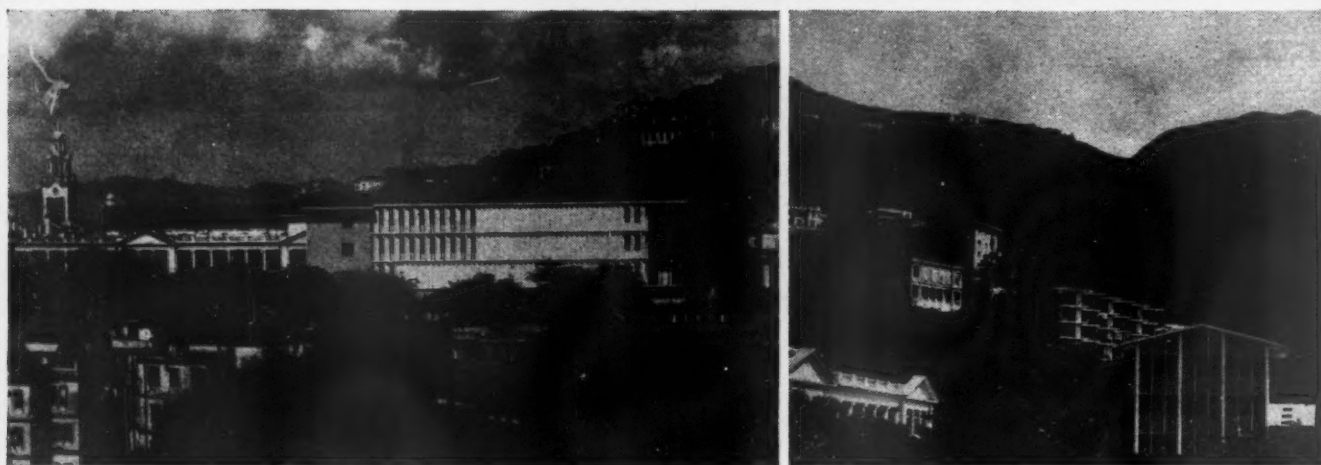
Lars Myronberg

Hong Kong is about 20° north of the equator. It has a hot humid summer and a winter period lasting several months, during which the temperature never falls to freezing point but cold winds and clouded skies make it essential to have heating in buildings. It is in the typhoon area and winds of 134 miles an hour have been recorded. If louvres are used—as on some of these buildings—they must be heavy to stand the typhoons, and it is not normally an economic possibility to make them movable.

Hong Kong was a city of 1 million people before the war; but its population has now risen to 2 millions, largely owing to an influx of refugees. Water supply has not kept pace with the increase of population and it is normal for taps to be connected to water mains while water required for lavatories and other purposes is obtained by damming some of the many small nullahs which become torrents during the heavy rains. Water storage tanks are a major feature in many buildings, and gutters both on buildings and on sites are necessarily very large.

The local building industry is of a high standard and materials are good, though somewhat limited. Excellent well-seasoned teak is commonly used for floors and outdoor woodwork and for furniture. The Chinese carpenter uses the most primitive tools but is a sensitive and competent craftsman. Bricks and tiles were formerly imported from Canton. There exist locally manufactured bricks and tiles to take the place of these; but their range is more limited. Ceramic units are available in the form of grilles, and these are fairly widely used. There is a difficulty in obtaining interesting texture, and efforts are made to overcome this by the use of various types of concrete finishes, especially Shanghai plaster. The majority of building materials, however, are imported; also equipment and fittings. While the Public Works Department uses a quantity surveyor and a specialist engineer in a consultant capacity, the normal job in Hong Kong has for many years been done without quantity surveyors.

*The specification for Shanghai plaster is: rough coat, 1 part cement to 3 parts sand, by volume, applied 1-inch thick and combed to form key before hardening has commenced; second coat, same as first coat, also 1-inch thick and combed; finishing coat, 1-inch thick, consisting of 1 part of cement and 1 part by volume of stone and marble chips graded and proportioned to obtain the desired tint. This last coat is permitted to harden sufficiently to allow the surface to be washed and scrubbed with a stiff brush (usually with bamboo bristles) to remove the surface cement, leaving the stone chips exposed.

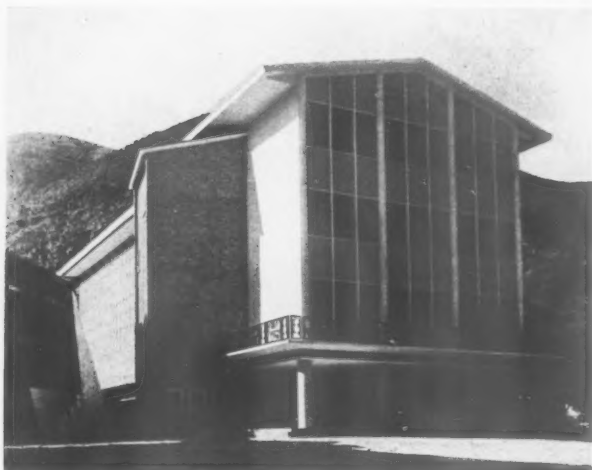


The university grounds, Hong Kong. Left, the new chemistry laboratories set among older university buildings. Right, gable end of the laboratories; immediately behind them the second block of staff flats; higher up the hill the first block of staff flats. See following pages.

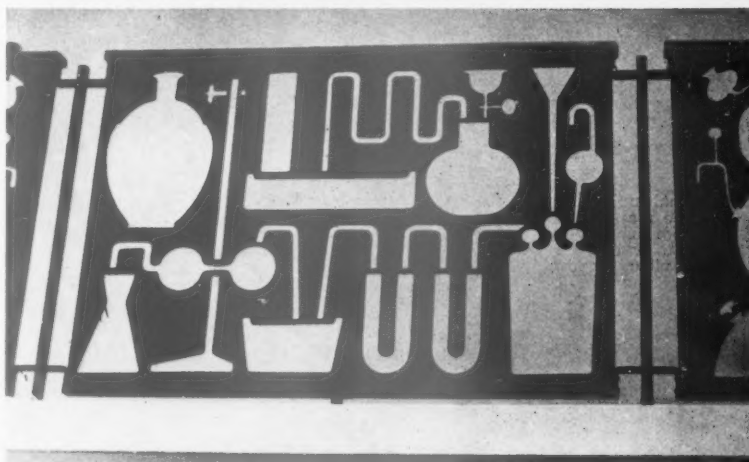
1. CHEMISTRY LABORATORIES FOR THE UNIVERSITY

This building houses the whole Department of Chemistry and provides both teaching and research laboratories, two lecture halls and large storage accommodation. As sites in the University grounds are scarce and restricted, as well as being for the most part steeply sloping, it was not possible to orientate the building correctly. Its long sides face east and west, necessitating the extensive use of sun-shuttering. The building is partially air-conditioned.

It is of reinforced concrete frame construction, plas-

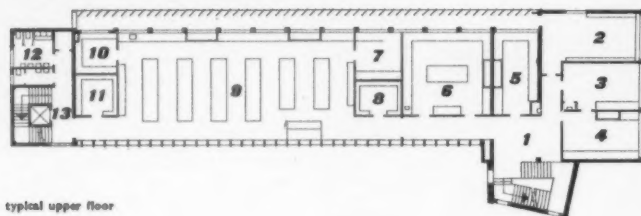


tered externally and finished in strong colours (see captions to photographs). The roof is covered with black Chinese tiles. The consulting engineer was Mr. S. E. Faber.



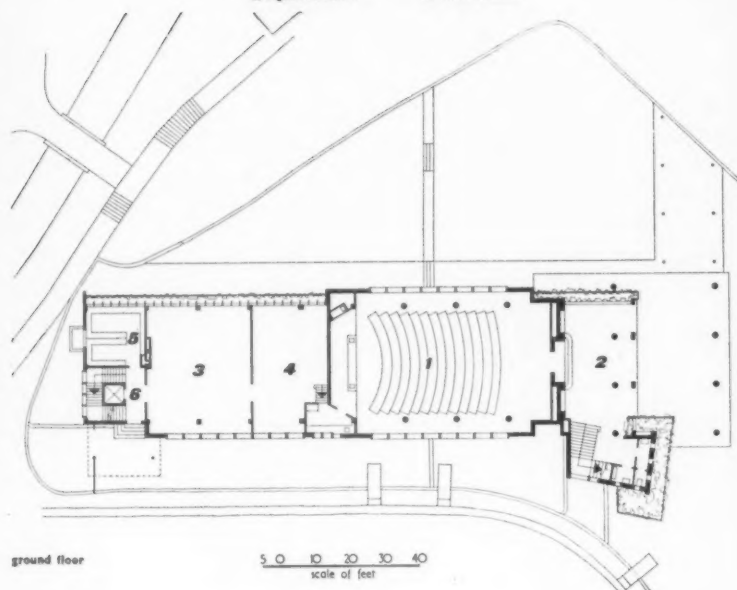
1, the entrance elevation. The vertical members are of concrete, with grey panels between of Shanghai plaster (see footnote on facing page). 2, the west side (see also distant views on facing page). The louvres, which act as sun-screens, are of concrete, plastered and coloured yellow with white edges. The ground - floor walls are of granite. 3, a detail of the design of the metal balustrade of the balcony over the entrance. It is painted dark blue.

CHEMISTRY LABORATORIES



typical upper floor

- key
- 1. hall.
 - 2. library.
 - 3. professor's room.
 - 4. professor's laboratory.
 - 5. special laboratory.
 - 6. organic research.
 - 7. lecturer.
 - 8. glass store.
 - 9. 2nd year laboratory.
 - 10. balance room.
 - 11. store.
 - 12. w. c.'s.
 - 13. lift and stairs.



ground floor

- key
- 1. lecture room.
 - 2. lobby and entrance.
 - 3. chemical store.
 - 4. glass store.
 - 5. stores.
 - 6. lift and stairs.

4. a detail of the main entrance on the south side, looking beneath the portico. 5. the main staircase, with pierced wall of ceramic blocks.

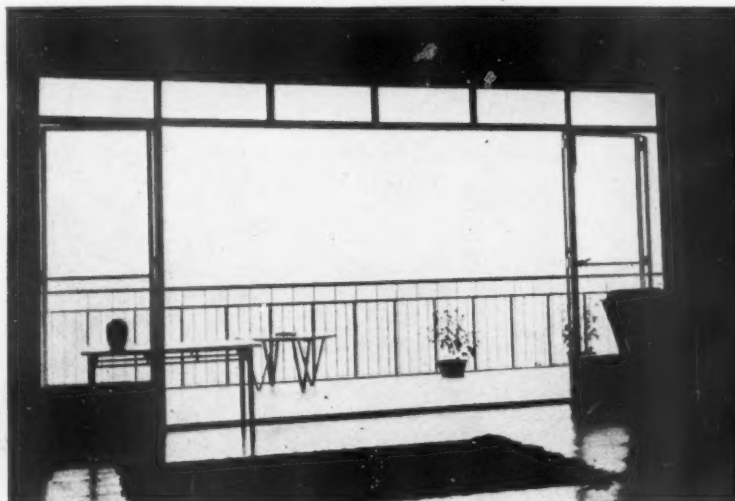
4



5

2. UNIVERSITY STAFF FLATS: FIRST BLOCK

6. the balcony outside the main living-room of a typical flat. It has a wide view over Hong Kong harbour. 7. on the balcony. The floor is grey mosaic with strips of white. The balustrade is metal, painted blue, with a teak handrail. The ceiling, also, is painted blue.



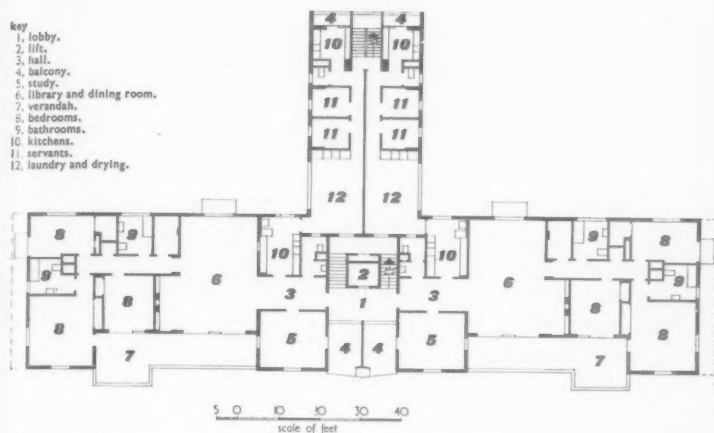
6



7

This building only was carried out in association with a Hong Kong architectural firm, Messrs. Chow and Lee. It occupies a steeply sloping site on the higher part of the University grounds, with views looking northwards over the harbour. It is a reinforced concrete frame structure, finished externally in the local granite (which is of good quality and light grey in colour) and plaster. The wood used externally (for balconies) and internally is teak.

- key
1. lobby.
 2. lift.
 3. hall.
 4. balcony.
 5. study.
 6. library and dining room.
 7. verandah.
 8. bedrooms.
 9. bathrooms.
 10. kitchens.
 11. servants.
 12. laundry and drying.



typical floor plan

8, the north façade of the flats facing the harbour (see also distant view at foot of page 316). The walls are deep chrome in colour with the soffits of the balconies blue and their edges white. Ground-floor walls are granite, and the columns are encased in Shanghai plaster (see footnote on page 316), with an oyster-shell content giving a light-grey finish.



8

3. UNIVERSITY STAFF FLATS: SECOND BLOCK

9, the west elevation. The main wall surfaces are granite and the others concrete, not plastered. It was a constricted site, owing to the precipitous nature of the university grounds, making an almost due west orientation unavoidable; hence the staggered plan, illustrated in this photograph, turning the rooms away from the sun but permitting views over the harbour from the balconies.



FLATS: SECOND BLOCK

This block provides twelve flats for members of the staff of Hong Kong University: eight two-bedroom flats and four one-bedroom, arranged three to the floor. The site is in the University grounds, a little way further up the hill than the chemical laboratories illustrated above, but below the first block of flats (see general view on page 316). Construction and finishing materials are the same as in the first block (see above), except for the wooden balconies. The entrance porch is finished in teak and brass with a black marble step. Mosaic is used on the entrance-hall floor and balconies. Furniture is of teak. The consulting engineer for the two blocks of staff flats was Mr. S. E. Faber.



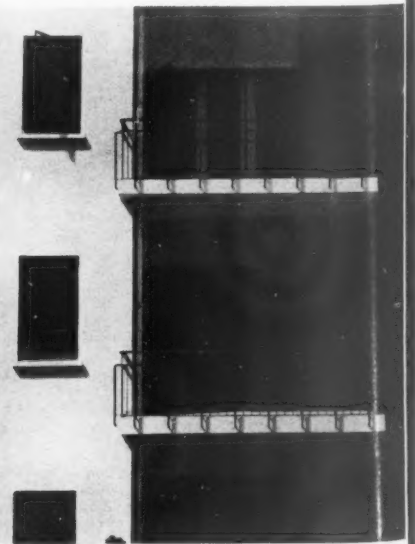
10, oblique view of the western side, showing the distant view southwards over the harbour. 11, a typical living-room. The furniture is of teak. 12, a corner of the living-room looking out on to the balcony. Floors and furniture are teak. The balcony chair is a locally produced article costing only about 25s. 13, close-up of the small balconies, adjoining the kitchen windows, on the side elevation.



11



12



13



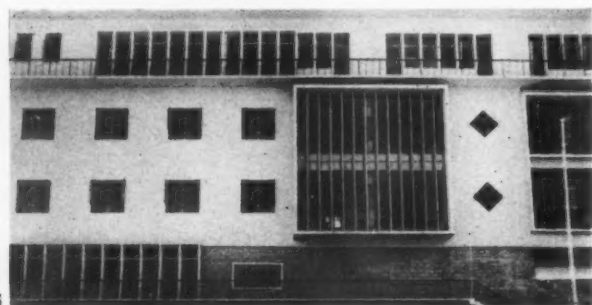
14

14, a detail of one of the balconies taken from immediately inside the living-room, showing the harbour view and the contrast in texture between the granite walls and the smooth concrete surfaces. The floor is of mosaic and the balustrade of metal with a teak handrail.

4. COLLEGE AT KOWLOON

Wah Yan College, Kowloon, is across the harbour from Hong Kong proper. The college, in Waterloo Road, has been built for the Jesuit Order and provides accommodation for 900 boys and for the Fathers engaged in teaching.

The buildings consist of three groups, linked by covered ways serving as cloisters. The first group to be



15

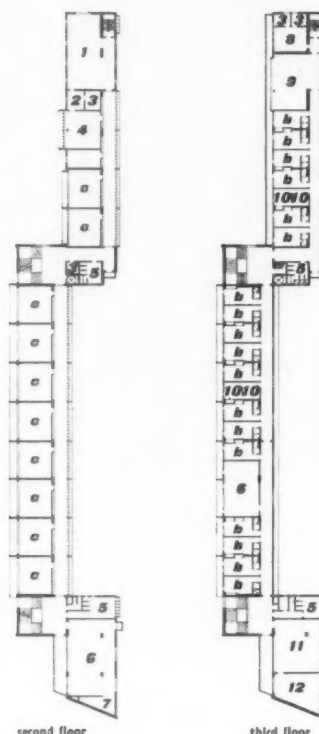
completed is illustrated here. This consists of classrooms, science laboratories, lecture rooms, administrative offices, common rooms, Fathers' rooms and private chapels for the Fathers, and is terminated at its eastern end by a dining-room. The second group contains an auditorium, with green rooms and other ancillary rooms, and the third a chapel, as shown on the ground-floor plan.

The buildings are of reinforced concrete frame construction, finished externally in plaster and the local granite (see under University staff flats). Internal finishes are simple and include much teak, used for doors and grilles. The consulting engineer was Mr. Hugh Braga.

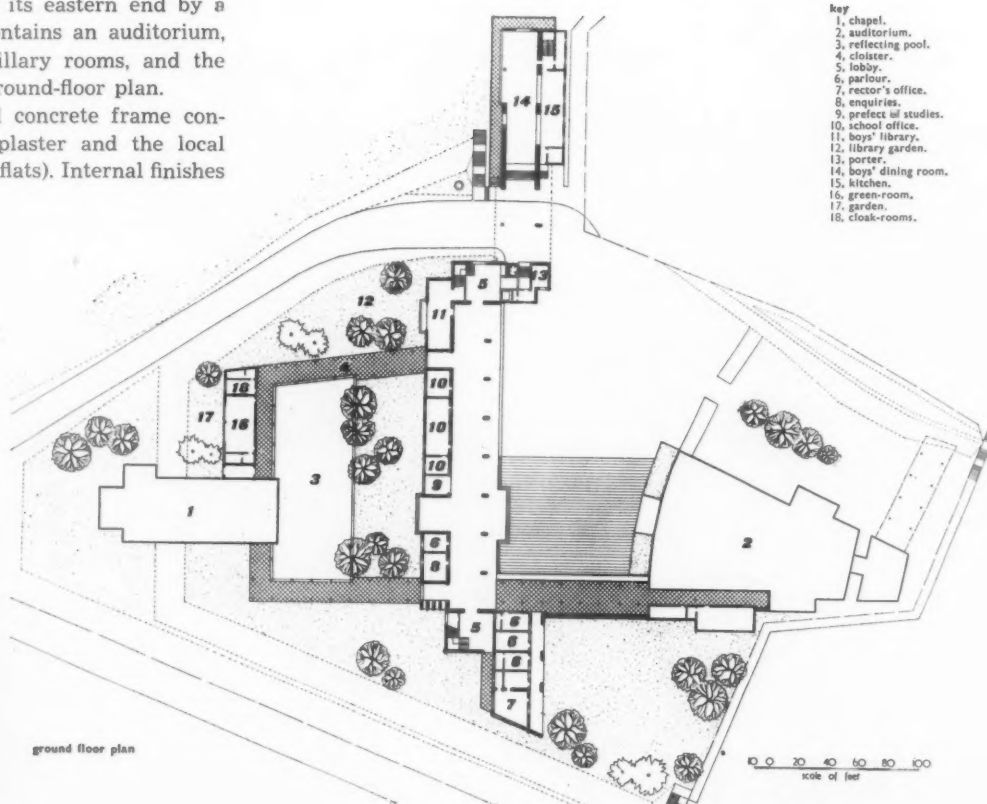
15 (above), part of the west elevation. 16, a classroom corridor. The concrete louvres are plastered and painted white and pale green. The floor is yellow and grey.



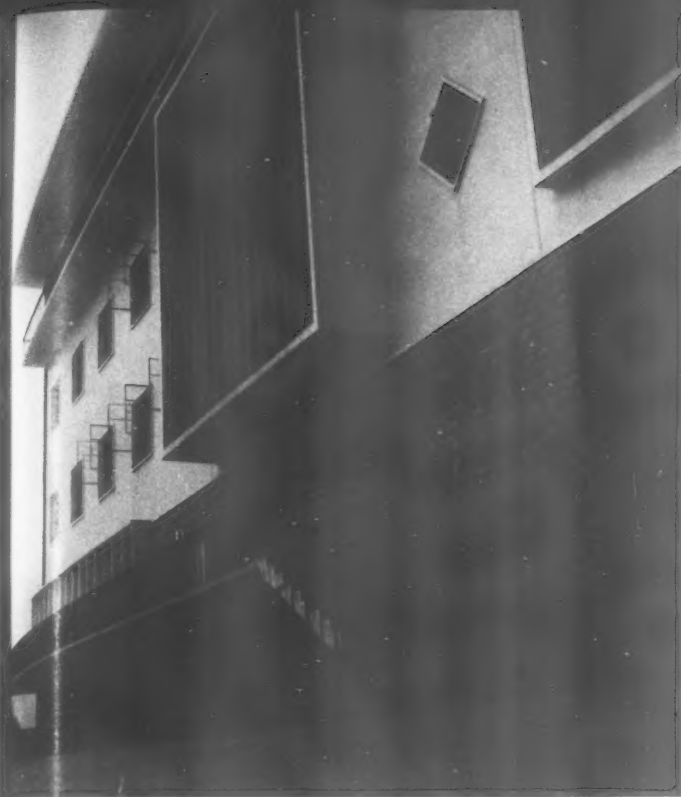
16



key
1, physics laboratory.
2, preparation room.
3, store.
4, lecture theatre.
5, w.c.'s.
6, chapel.
7, sacristy.
8, kitchen.
9, dining room.
10, alarar.
11, recreation.
12, library.
b, bedroom.
c, classroom.



key
1, chapel.
2, auditorium.
3, reflecting pool.
4, cloister.
5, lobby.
6, parlour.
7, rector's office.
8, enquiries.
9, prefect w/ studies.
10, school office.
11, boys' library.
12, library garden.
13, porter.
14, boys' dining room.
15, kitchen.
16, green-room.
17, garden.
18, cloak-rooms.

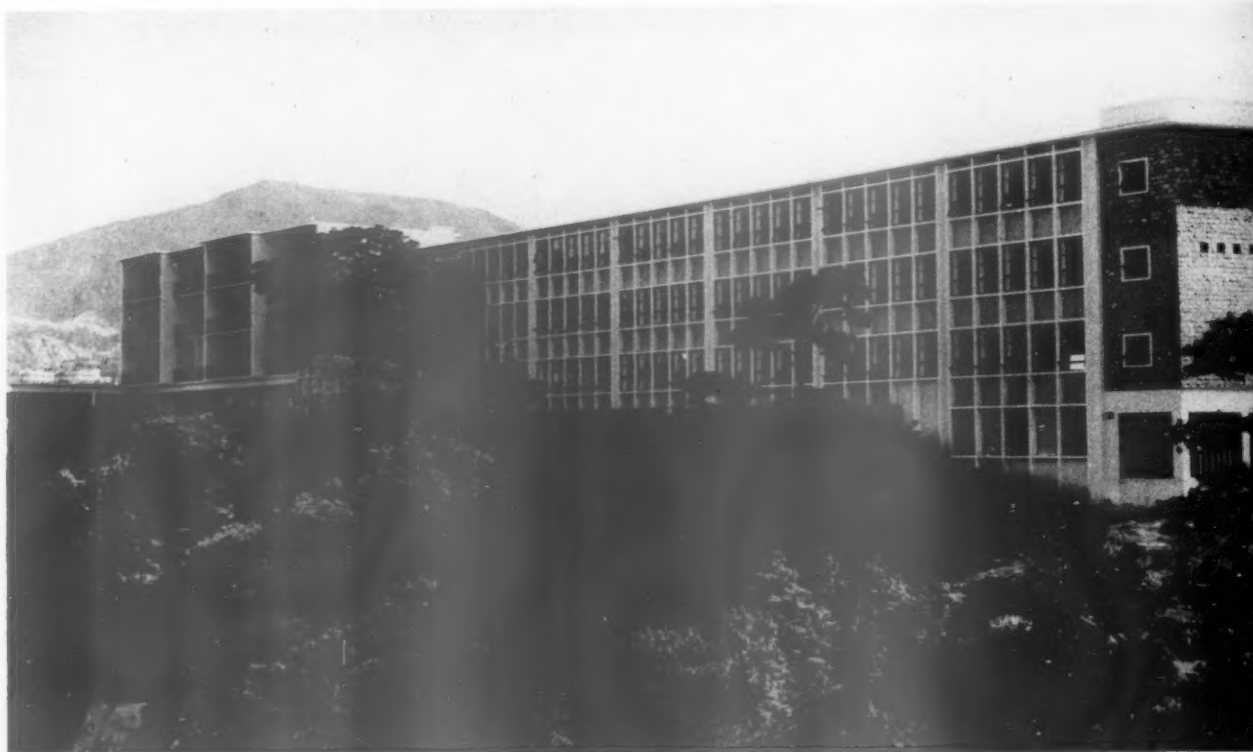


18



17, close-up of the west front of the college at Kowloon. The balcony is reached from the windows of the cafeteria. The large window above lights a lecture hall. Materials are plastered concrete and local granite. 18, the entrance façade. Concrete louvres are green and the framing members white. The columns beneath are dark blue.

5. COLLEGE AT MOUNT PARISH



19

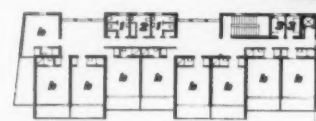
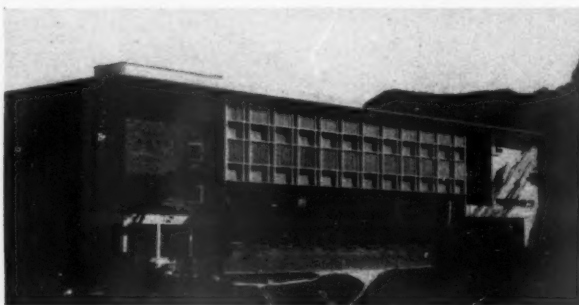
19, from the south-west showing the precipitous nature of the site. The classrooms are in the foreground, and in the background on the left are the Fathers' quarters and the administrative offices.

COLLEGE AT MOUNT PARISH

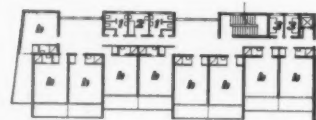
This also is known as Wah Yan College and (like that just illustrated) is for the Jesuit Order, but it is situated in the island of Hong Kong itself. It accommodates 1,000 boys and is placed high up on a rocky, well-wooded hill. The teaching and administrative accommodation is in an L-shaped block, the main area running east and west. The shorter area is open on the ground floor to provide a covered playground. Covered ways also surround a courtyard on the south side, joined by the auditorium and chapel. This is overlooked by access galleries linking the classrooms on the upper storeys. In construction and materials it is similar to the other Wah Yan College.

In addition to Lars Myrenberg, the following architects were associated with Professor Gordon Brown in the

design of the buildings illustrated on these pages: Kell Astrom ; Folke Ejorck ; M. Hugo-Brunt ; J. Da Silva.



third floor



second floor

key
26, library.
27, recreation.
27b, bedroom.
28, dining room.
29, kitchen.
30, pantry.
31, spare.
32, store.
33, physics laboratory.
34, store.
35, dark room.
36, preparation.
37, lecture theatre.
38, biology.
39, open corridor.



first floor



ground floor

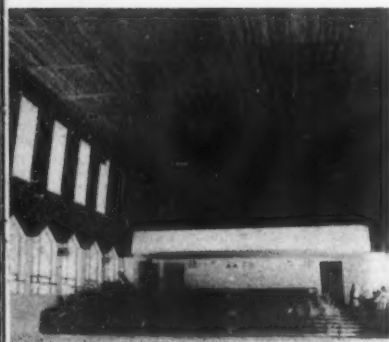
key
b, bedroom.
c, classroom.
1, w.c.'s.
2, bath.
3, altar.
4, chemistry laboratory.
5, preparation.
6, store.
7, lecture theatre.
8, library.

20, the south side of the building, with laboratory windows screened by louvres set in concrete frames.

21, the wall of the assembly hall. The chapel is beyond on the left. 22, inside the assembly hall, which has ceiling and upper wall surfaces of wood strips.

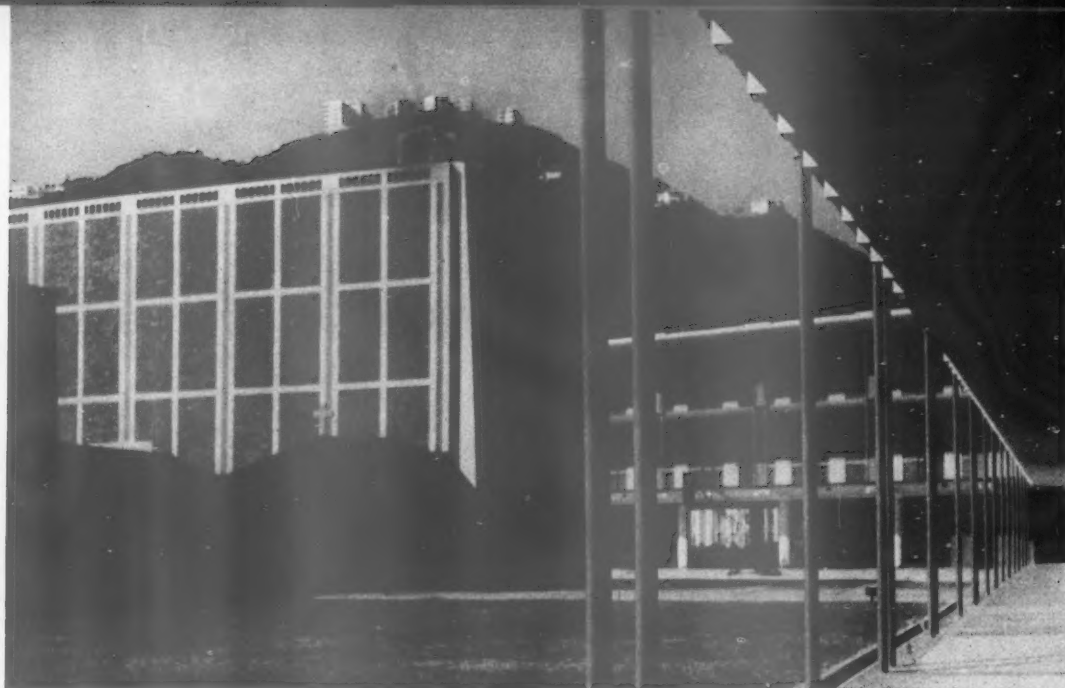


21

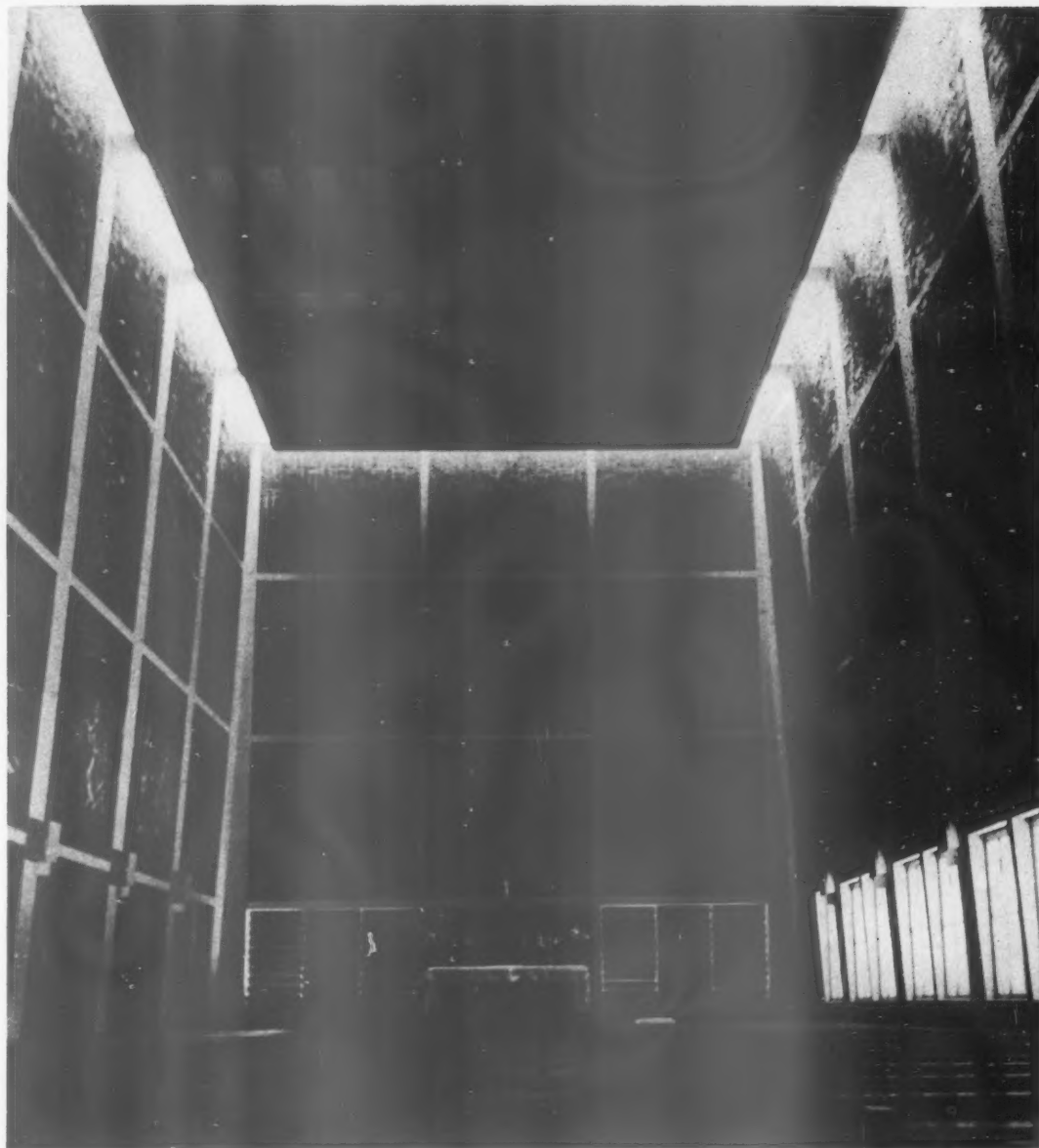


22

key
b, bedroom.
c, classroom.
1, entrance hall and lobby.
2, waiting room.
3, enquiries and telephone.
4, parlour.
5, prefect of studies.
6, general office.
7, rector's secretary.
8, rector's office.
9, staff common room.
10, art and music.
11, assembly.
12, stage.
13, stage store.
14, green rooms.
15, chapel.
16, sanctuary.
17, sacristy.
18, spiritual counsellor.
19, w.c.'s.
20, cafeteria.
21, covered play garden.
22, showers and changing rooms.
23, games master.
24, covered way round courtyard.
25, courtyard.



26

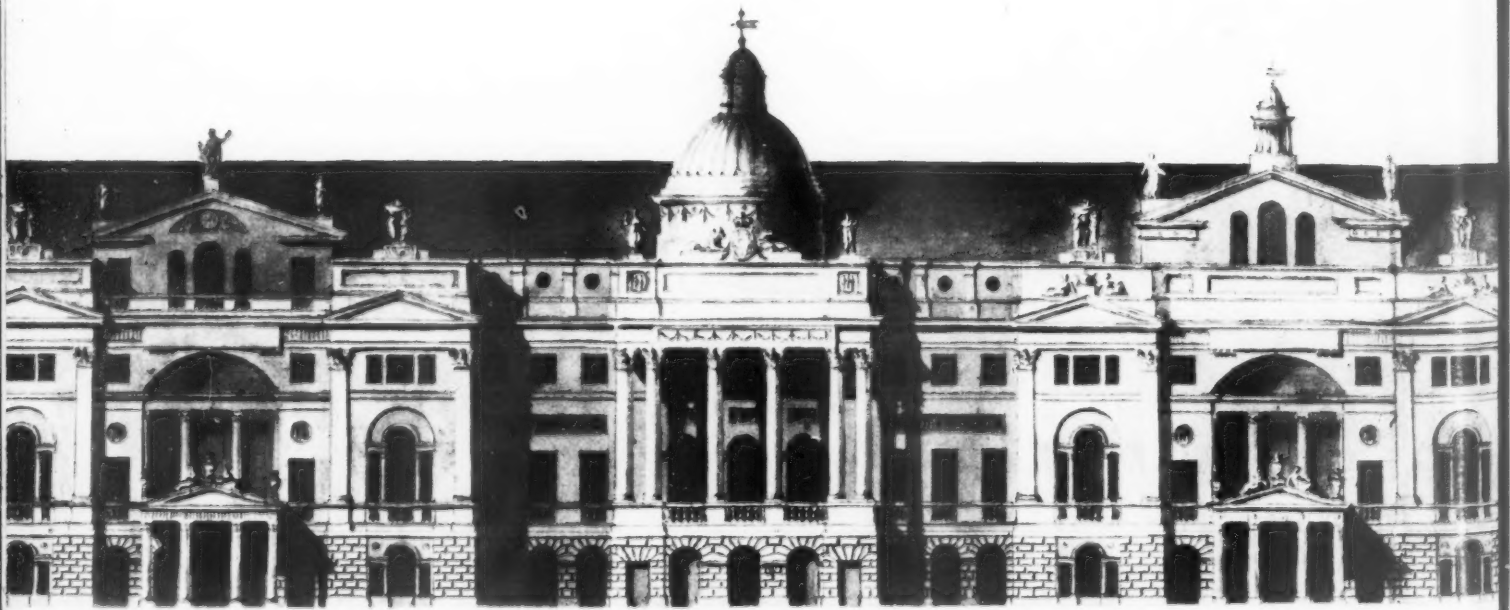
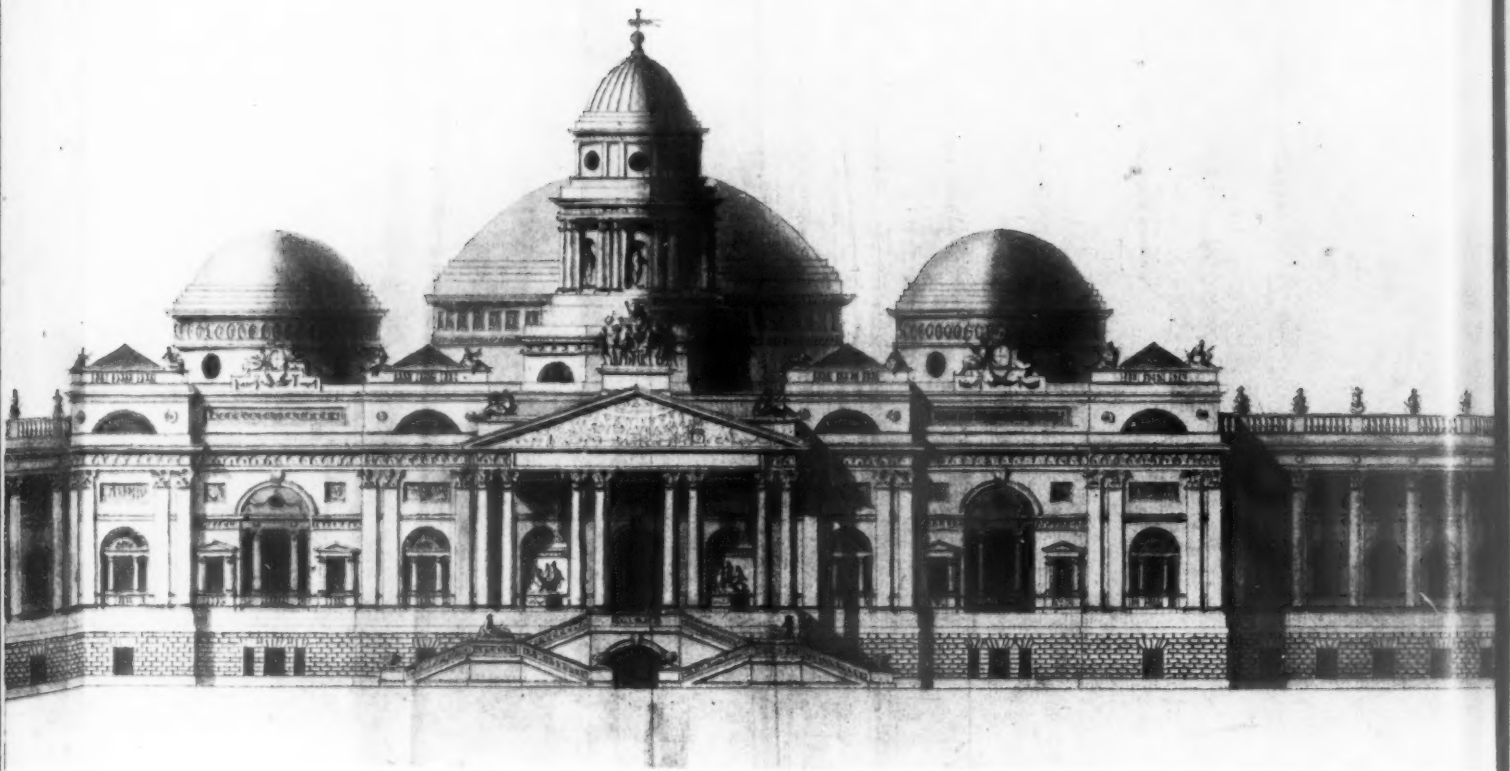


27



23, the courtyard separating the classroom block from the assembly hall and chapel, showing open access galleries to the classrooms. The chapel wall is on the right. 24, the entrance to the chapel from the courtyard. 25, the only decorations in the chapel are the Stations of the Cross in mosaic, set in the exposed brick walls and designed and executed by Julia Barron: the fourteenth Station: the placing of Christ in the tomb. 26, the chapel seen across the courtyard. The verticals in the foreground are rain-water pipes. On the right of the chapel is the covered playground and beyond it the high ground above Hong Kong, crowned with recent blocks of flats. 27, inside the chapel looking towards the altar. The walls are of local brick. There will eventually be a large cross over the altar.

Design for the Houses of Lords and Commons



James Adam's design for a new Parliament House, above, 1, was a young architect's dream of the greatest commission his country might offer him, conceived, as John Fleming describes, under the eyes of the Roman pioneers

of neo-classicism. Though the dream, and the sense of adventure in which it was born, did not survive Adam's return to England, something of his Roman manner continues in the design for an Opera House, lower picture, 2.

JAMES ADAM AND THE HOUSES OF PARLIAMENT



3, portrait by Batoni, hitherto thought to be of Robert Adam, but now identifiable as James by the capital under the sitter's elbow (see 6).

The Restoration of 1680 was welcomed in architectural circles as the harbinger of new and lavish programmes of Royal patronage. The exiled Court had, it was fondly hoped, been infected by Louis XIV's building mania; and when the new sovereign emulated the French King by dining in public at the Banqueting Hall, what could be more natural than to assume that he would wish to see completed the great designs by Inigo Jones for a new Palace of Westminster. For the next fifty years every ambitious architect nursed the hope that he would be commanded to carry out Jones's designs and even, perhaps, be allowed to add something of his own to that monumental scheme. Many such projects were prepared, not only by professional architects but also by spirited amateurs such as William Emmett, who collected some of the original drawings for the Inigo Jones palace and whose own preposterous design, made between 1710 and 1714, may be inspected at the British Museum.¹ In 1710 John Talman, the dilettante son of William Talman, still hoped that he might have the honour to see Whitehall built after Jones's designs,² and that his Italian studies might be of use should that ever come about. Even as late as the 1780s William Kent³ designed a Royal palace; but hope in Royal patronage was by then on the wane, and in 1782 Kent produced his first designs for a parliament house—a new project which, from this date

onwards, took the place of the Royal palace in the minds and hopes of all British architects who sought an opportunity to express themselves on the grand scale enjoyed by their masters of antiquity.

That James Adam prepared designs for a new Parliament House has always been known, but it is now possible to watch, in several of his letters from Italy which have recently come to light,⁴ how he approached this grand object of English architecture. His designs were made between 1760 and 1762, while he was studying in Rome under Charles Louis Clérissieu, the neo-classical architect who had been Robert Adam's friend and artistic mentor in Rome. It must be remembered that before James went abroad he had no theoretical training in architecture though he had gained some practical experience of the building trade by working under Colonel Skinner of the Board of Ordnance at Fort George near Inverness.

'A modern work I have long had my eye on,' wrote James Adam on July 9, 1760, from Venice, two months after leaving England, 'but neglected it shamefully in England because some difficulty arose in the Execution; what I mean is the procuring some Intelligence what is requisite for a Parliament house & its attendants. I'm afraid if this appear'd a matter of difficulty to me who had little business, it must be much more so to Bob, who has his hands full; yet as things of that kind are made more easy by ranging them methodically I'm resolv'd to make out a note of Queries on that subject for Bob, which he can answer at his Leisure by enquiring at Elliot some things, at Wedderburn about others

& at Oswald about the remainder. Or perhaps Ld. Littleton cou'd give him a good deal of Information.'⁵ James sent off his list of queries some six weeks later and it is now gummed into the front of Volume VII of the Adam drawings in the Sir John Soane Museum. He wanted dimensions of the various apartments as they stood with notes on their uses and whether they were generally considered large enough. The list is practical even to small details—'What Committee rooms are necessary, Is a Coffee house necessary, or any other rooms for the house of Commons?'—but the eight principal questions he asked could hardly have taken him far towards a practical design.⁶ Robert certainly took him at his word about answering at leisure, for the next reference to the scheme in James's correspondence comes more than a year later when he wrote rather plaintively from Naples, on October 20, 1761, that 'This winter at Rome I had dedicated to the forming & making the Designs of a great project such as a parliament house, which I wrote of formerly to Bob, & shou'd now be vastly glad to have his answers to my questions without which I shall proceed with great uncertainty.' It may be surmised from these remarks that James Adam's main purpose in setting himself this grandiose project was to gather together the fruits of his first year's study in Italy and to work out on paper those neo-classical principles of design which Clérissieu was teaching him. His parliament house should, therefore, be regarded as a first year student's exhibition project rather than as a mature and fully considered design, though James Adam himself certainly hoped that it might be used, should the commission, that architectural plum of the century, fall into his

or his brother's lap. He was at pains to ensure that his designs should provide for all the specialized needs of the members of Parliament; and he told his sister Peggy, who had been attending a debate in the House, that she had not 'thought more of that Honble. house than I have done of late, (of) its outgoings & incomings of its benches & tables the number of its members, their being well heard &c.'

By the end of January, 1762, 'that lofty project' had so far advanced that he began 'to think of beginning my finish'd Copy's' but decided to wait until Robert had taken his seat on the Board of Works and could answer all his queries in detail. On February 4 Robert confessed that William Robinson, Secretary of the Board for Westminster, 'has disappointed me terribly, but he swears it is not his fault as a Gentleman is in the Country who has some of the memorandums concerning both Houses of parliament, where ever I can git them you shall have them without delay and I am sorry you have not got them long ago.' He must have sent the information almost immediately after writing this; for James in a letter of February 20, to his sister Peggy, remarks that 'with Bob's plans & critique. . . You will find I shall make you a clever parliamt. house,' and goes on to say that he will soon be 'one of the ablest of my profession & deserving the late Character given of Inigo Jones. You'll think it very vain this sentence, & Bob I know will alledge that this is the conceited time of my Life, but I will promise faithfully to drop my assertion if you & the world don't support me in it, at my return home.' No doubt he had in mind Inigo Jones's Palace of Whitehall, and it is interesting to note how long that great project dominated the imaginations of English architects.

As the Roman spring advanced, his great design began to take shape—though a somewhat peculiar one, so far as one may judge from his provokingly vague descriptions, 'I never was of opinion that one cou'd contrive rooms to make people laugh or Cry,' he told his sister Jenny on April 10, 'but am more persuaded than ever, that Arch(itecture) is capable of receiving every sort of Character one pleases to give it, that some body wou'd be at a loss to say to what purpose such a building was put,' not of course that he shared any crude notions akin to 'functionalism' in the modern sense, for he goes on to say, 'but I do not mean that anything of this kind shou'd be done without the aid of sculpture, & painting but with their Assistance Architecture will do anything. The Ancients in this, as well as in every thing else, have had Just Ideas. One is never at a loss to judge from a small remain, if a Temple was dedicated to Mars to Juno Apollo or Venus. One can see the solemn in the pantheon the grave & majestic in their Temples & the gay in their Arabesques of Titus &c. I only mention these few examples to

¹ Sir Gilbert Elliot (1722-77), M.P. for Selkirkshire 1762-5, Alexander Wedderburn (1738-1806), later 1st Earl of Rosslyn, a lawyer and favourite of Lord Bute, James Oswald (1716-69), M.P. for Fife 1764-68, Lord of the Treasury 1769-68, George, 1st Lord Lyttleton of Frankley was Chancellor of the Exchequer in 1760.

² The list of queries sent by James Adam from Venice on August 24, 1760, reads as follows:—

1. What is the use of a Court of requests, dimensions of the present one?
2. Westminster Hall, if us'd on any other occasion than the trials of Peers, is the King crown'd there; do. Dimensions?
3. The Courts of Justice in Westminster Hall how many; their dimensions are they thought large enough. Are not the Courts of Chancery of King's Bench, of Common Pleas, of Doctor's commons held in this Hall, is there any more?
4. House of Commons its present size, is it thought large enough, is there any additional convenience wanted to this present one. What are they?
5. What Committee rooms are necessary. Is a Coffee house necessary, or any other rooms for the house of Commons?
6. Dimensions of the present house of Peers, what rooms are necessary for them, is a Committee room or a Coffee room wanted?
7. Is it not necessary to have an apartment adjoining the house of Peers, for the King to put on his Crown and Robes, before he takes his seat in the house. Is there likewise apartments for this purpose wanted for the Princes of Wales, or the rest of the Royal family?
8. Are there any clerks rooms wanted for the Houses of Peers or Commons, or Rooms for Records for either house, or for the Courts of Justice?

The drawings illustrated in this article are reproduced by courtesy of the Curator of Sir John Soane's Museum.

¹ Department of Prints and Drawings, 1848, 6, 5, 1-4.

² Letter-book in the Bodleian Library: MS Eng. letters: c 34.

³ H. M. Colvin: *Dictionary of English Architects*, p. 842.

⁴ The letters are among the Penikouk papers and are quoted by kind permission of Sir John Clerk, Bt.

show that the Art can attain to something of characteristic. This is what I strongly Aim at in my Parliament house. That making the improbable supposition of its being built, ruin'd & no mention made of it in history or Records, that notwithstanding Posterity who have ever read of Great Britain or its constitution shou'd not be a loss to say, 2000 years hence, this has been for the great Parliamt of the Peers & Commons, this is the Hall for Coronations this is the house of Commons & that the ho. of peers, here are the Cts. of Justice & there the Committee rooms &cos. Nor wou'd there be any risk that it be suspected to be rais'd by any other people but the British, nor at any period before the Union. As I have taken care N. Bn. shall take its share in all Decoration, so that I will venture to say that Posterity wou'd even guess at the Archt's being from beyond Tweed.' His precise means of suggesting what he wanted is explained in another letter: 'I have personify'd the Thames & Forth transforming them into Fountains at the foot of my great stairs. The former leans on a Lion with a crown of Roses the Anchor lies by him & the Oak & mistletoe grow up by his side. The unicorn supports the Forth with a garland of Thistles & Rue, from a rock by his side spring the fir & the Birch. As I have a great deal of sculpture I have recourse to a good deal of this sort of Invention. I don't know if this kind of fancy will be popular or not.' Can it be for this sort of symbolic decoration that he sent to London for a herbal and a book on heraldry?

This enthusiastic account evidently caused some misgivings among the Adams at Grosvenor Street, where a very hard-headed Scottish attitude to architecture prevailed. A sharp note was immediately dispatched to bring the starchy-eyed young architect down to earth. 'I am extremely sensible,' James replied, 'of the justness of your observation about the study of a palace as that & indeed all such works, is very far from being the produce of genius alone, but of an immense course of study and reflection.' The result of his further reflections can hardly have been reassuring, for he next reported, with great zest, 'a Capital of my own Invention' with which he was so pleased that he showed it to Natoire, the Director of the French Academy in Rome, 'who said he wou'd have taken it for Antique.' It is difficult to believe, when one has read the description of this wondrous capital, that Natoire was doing more than humouring the enthusiastic James, who had no doubts about the merit of his confection and reproached himself for his stupidity in showing it to 'a french man & an Artist who was capable of borrowing the thoughts & calling the invention his own.' For this reason he immediately sent home an account of it so that 'shou'd the Invention be stole, I had this letter to show that the Invention was originally mine.' A drawing would take some time to prepare and for the meantime a description must suffice. 'It is however form'd in this way Lions & Unicorns alternately support the angles of the Abacus, sustaining themselves on the Acanthus leaves, their hinder parts converted into Chimers form twenty stalks that produce roses & thistles, the middle of the Capital is adorn'd with a scepter bearing the Dove the emblem of peace, over it the Crown of Britain instead of the sorinthian rose and on the under part or moulding of the Abacus

is the collar of the order of the Garter. This Capital is modell'd in wax & Bronz'd & has altogether the air Antique, & has surpris'd every body that has seen it, who indeed are few beside Natoire, my two English friends Messrs. Crispin & Richardson. This same Celebrated Capital is for the great portico of my project, as I suppose you may guess.' One may indeed, and the description of it may well give our learned 'art-historians' some food for thought when analysing the influence of Classical antiquity on British architecture. The model itself has disappeared but the drawing is in the Soane Museum¹² and not difficult to recognize. 8. James evidently intended to have this engraved and published with a dedication to the King.¹³

This design for a capital is of some importance to the historian of art as it enables the sitter in the Batoni portrait, 8, to be identified as James Adam.¹⁴ This portrait has always gone under the title 'Robert Adam,'¹⁵ though it has recently been suggested by Mr. John Steegman¹⁶ and Mr. Alastair Smart¹⁷ that the sitter might be James Adam. Their suggestion is now proved to have been correct, for the capital on which the sitter rests his left arm corresponds to that described in the above-quoted letter, and to the drawing, 6.

By October, 1762, James reported home that his 'parliamentary labours grow pretty voluminous at present,' though it seems doubtful, in view of the disclosures about his skill in architectural draughtsmanship contained in his next letter, whether he had put his ideas into any sort of order, or indeed was capable of doing so. For in a letter to Robert on December 4 he confesses incompetence 'both as to Perspective as to figures & Ornament' and pleads for another five months in Rome in order to gain some skill in them. 'As to the first' (perspective), he says, 'I have no practice in, & consequently am not at all assur'd of my rules & shou'd be apt to forget them very soon: the second (figures) wou'd be an immense advantage to us in the composition of our Ceilings & other decoration & the third (ornament), you know, there is no such thing as doing without.' As for the great project on which he had been working for more than a year, it was 'realy not in a condition to show in England, as I have not an Elevation yet finish'd & my great section is also but little advanc'd, so that you see that I have realy no more than my plan complete. Now to hasten it I have put two hands upon it, at a vast rate, so that in five months I shou'd be in fine order & realy in condition to surprise both the K(ing) & his M(ake)r.'¹⁸

A fair number of drawings for the

¹² Adam drawings, Vol. VII, no. 66.
¹³ Two drafts for the dedication may be found in one of James Adam's notebooks preserved among the Penicull Papers. The first draft runs: 'Descriptions of my Capital 1762. This British Order Invented at Rome by J. A. Archt. & intended for the principal portico of a parliamt. house Design'd by him at Rome in 1762 most humbly presented to Elk the King by his devoted subject & servt. the Author.' There follows the description. The second draft for the dedication differs only slightly in wording from the first.

¹⁴ It was unfortunately published as a portrait of Robert Adam in my article 'Robert Adam the Grand Tourist' (*Cornhill Magazine*, No. 1004). I did not see the photograph of the painting until the magazine was in the press, and I had not read James Adam's letters when I saw the original painting in Scotland.

¹⁵ J. Swarbrick: *Robert Adam and his Brothers* (1916) Fig. 101.

¹⁶ John Steegman: *Burl. Mag.* LXXXVIII (March, 1946), 55 ff.

¹⁷ Alastair Smart: *Burl. Mag.* XCVI (April, 1944), p. 103.

parliament house project have survived and are to be found among the Adam drawings in the Sir John Soane Museum. A rough wash drawing,¹⁹ two plans which seem, from the arrangement of circular courts which coincide with the disposition of the domes, to go with it; and a slightly modified, highly finished drawing of the whole facade, 1,—these four drawings are all that survive of the complete project. The other drawings which may be associated with the scheme are for details and decoration. From what James says in his letter it seems almost certain that the finished drawing is not from his hand. In Rome he employed, for so young a man, a considerable team of draughtsmen headed by his instructor and cicerone, Clérissieu. The drawing office seems to have consisted of Antonio Zucchi whom he had planned to take to Greece and Asia Minor as figure draughtsman, Domenico Cunego the engraver, George Richardson a draughtsman he had brought out from Scotland, Giuseppe Veronesi and Agostino Fiorentino,²⁰ two other architectural draughtsmen. In addition to this retinue it must be remembered that he would not have been above engaging extra hands for work he needed quickly. Moreover, two neat little drawings, one for the Lord Chancellor's ceremonial purse, 7, the other for a mace, 8, appear to have been made in London by Robert Adam's draughtsman, Brunias.²¹

Of the drawings for the complete parliament house scheme it seems likely that James Adam is personally responsible for the rough general design which is clearly drawn by an unskilled hand; neither Clérissieu nor any of the other draughtsmen would have allowed so rough a piece of work to leave his desk. The finished drawing¹⁹ appears to be the work of the office and it was probably done by the draughtsmen James called Giuseppe Veronesi and Agostino Fiorentino. The conception can be attributed to James (under the supervision of Clérissieu). The shallow domes and the somewhat flat neo-classical appearance of the front foreshadow the Adam style in a way that makes Clérissieu's contribution to its formation obvious. One cannot believe that James would have been capable of anything so original entirely on his own. The drawing of a baldachino for a throne²¹, 9, with a little lion and unicorn seated on either side can certainly be attributed to James Adam in conception, though it appears to be the work of the professional draughtsmen. There is a very neat drawing, coloured in wash, of a quarter of a circular pavement²² with the royal arms in the centre which might appear to be connected with the Parliament scheme though it is so unlike everything else in the series that it may well be a later design for some other project.

When James wrote to his brother about the famous capital he said he would send a 'sketch of it which I have not been able to get ready for this post,' and it may be surmised that the neat drawing in brown ink and wash, heightened with white,

¹⁹ Vol. I, no. 28.

²⁰ James Adam styles the two draughtsmen thus in a list of his retinue. They were no doubt natives of Verona and Florence, and it need not be assumed that their surnames were Veronesi and Fiorentino.

²¹ Brunias had been engaged in Italy by Robert Adam and taken back to London where he was paid about £60 a year. On January 20, 1762, James asked his sister Betty to obtain from Brunias a sketch of the mace used in the House of Lords and the Commons.

²² Vol. XXVIII, no. 2.

²³ Vol. VII, no. 70.

²⁴ Vol. VII, no. 8.

was done for him in the office. The only other drawings which can, with any confidence, be associated with the parliament house scheme are a series of thirty-nine sketches²³ in pen and brown ink and wash, heightened with white, which appear to be for painted or low relief decoration, 5. They represent such subjects as scenes from British history, British Victories, Peace, War, Pastoral Life. These drawings are not without technical ability, but they can hardly be the work of Antonio Zucchi who was employed as a figure draughtsman. It seems most probable that these are the work of James Adam who executed them under the tutelage of Zucchi, who was presumably acting as his master in figure drawing as Pécheux had acted for Robert Adam. But this is all, of course, a matter of conjecture; none of the drawings is signed, and what little we know of James Adam's draughtsmanship is based largely on the scratchy little pen and ink sketches he executed before he left Scotland.²⁴ Neither Robert nor James Adam was inclined to give their assistant artists public credit for what they had been paid to do, and although Clérissieu made all of the perspective drawings for *The Ruins of the Palace of the Emperor Diocletian*, his name is mentioned only in the introduction, as a companion on the expedition, and in the list of subscribers. With the parliament house scheme one is bound to give James credit, if any credit is due, for the original idea of the ambitious project; Clérissieu seems responsible for the stylistic part and the team of draughtsmen for the actual drawings. The interest of these designs today is largely historical for they illustrate the degree of accomplishment attained by James Adam in 1762 and confirm, what has always been supposed, that he made a very small contribution, if any contribution at all, to the development of the Adam style. This had already reached its full flower in 1763, by which year Robert had made his best designs—for Kedleston, Osterley and Syon. To what extent Robert Adam was indebted to his professional assistants, and in particular to Clérissieu, is of course another question and one which may never be answered. That he owed more to Clérissieu than he cared to admit is, however, evident from his letters.²⁵

When James Adam returned to England in 1763 he at once became involved in work with his brother, and vanishes from the scene as an independent figure. As for the parliament house project, one may surmise that it was forgotten while there was more immediate and obviously remunerative work to do. But the Adams did not cease to hope for some great national commission. In his dedication of the Spalato book to George III, Robert Adam expressed what one can only describe as the pious hope that his reign would fix an 'Aera no less remarkable than that of PERICLES, AUGUSTUS or the MEDICIS.' Among the drawings in the Soane Museum there are designs for law-courts²⁶, 4, and a national opera house²⁷, 2, which must have been executed some time after James Adam had returned from Italy.

²⁵ Vol. VII, nos. 21-44, 47-50, 60-67 and 114-119.

²⁶ A volume of these is among the Penicull Papers and there are a few similar inscribed drawings in the Soane Museum.

²⁷ For a brief account of Robert Adam's relations with Clérissieu see my article: 'Robert Adam the Grand Tourist' (*Cornhill Magazine*, No. 1004).

²⁸ Vol. XXVIII, nos. 10-15.

²⁹ Vol. XXVIII, nos. 16-18.

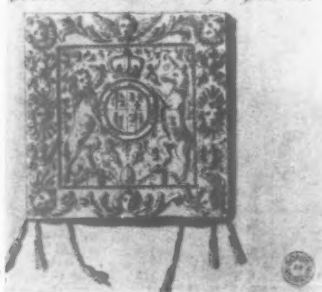


4



5

View in which the Lord Chancellor carries the Great Seal.



7

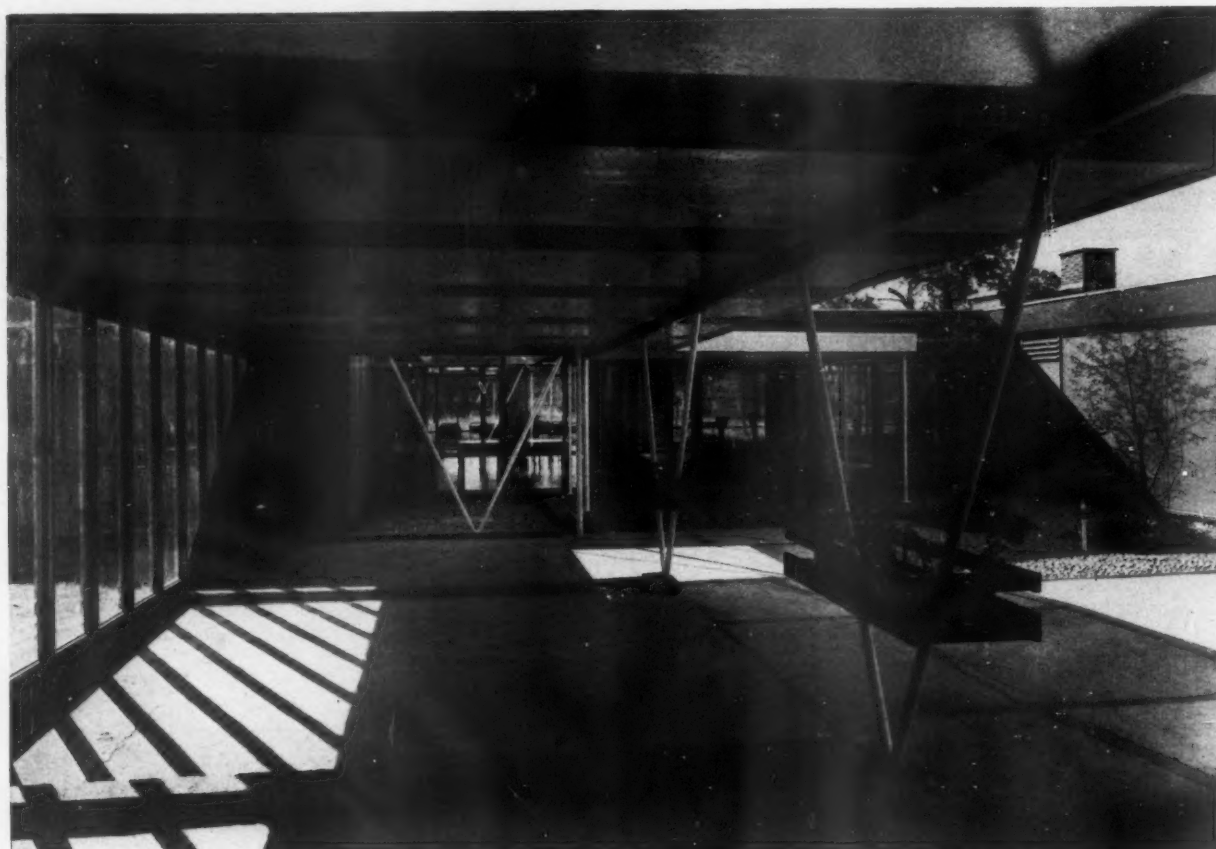
4, the Chancery Lane front of the projected law courts, which James Adam designed after his return from Italy; like the designs shown in 1 and 2 (page 326), it still breathes the influence of Rome and Clérissseau, and was his last work produced independently of his brother Robert. James's drawing of the capital, 6, identifies Batoni's sitter (3, page 327) as James. 5 is a design for a relief, 7 for the Lord Chancellor's purse, 8 for a parliamentary mace,² and 9 for a baldachino.



8



9



1, pram shelter between blocks, with central waiting area beyond. The V-struts provide wind-bracing.

HEALTH CENTRE AT WELWYN GARDEN CITY

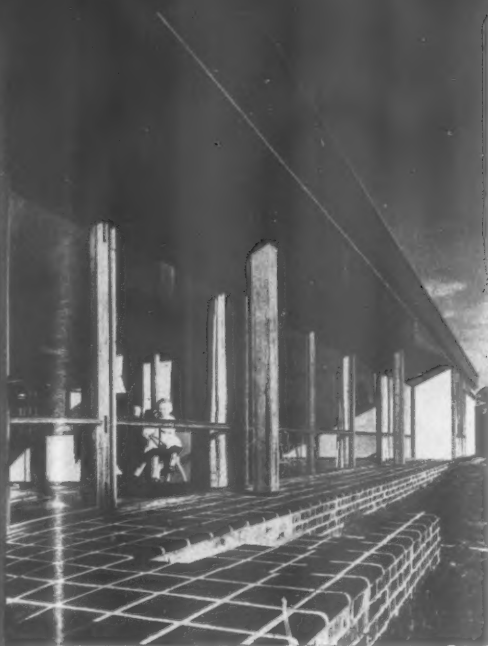
HERTFORDSHIRE COUNTY ARCHITECT: C. H. ASLIN

ARCHITECT-IN-CHARGE: PATRICIA A. TOWNSEND

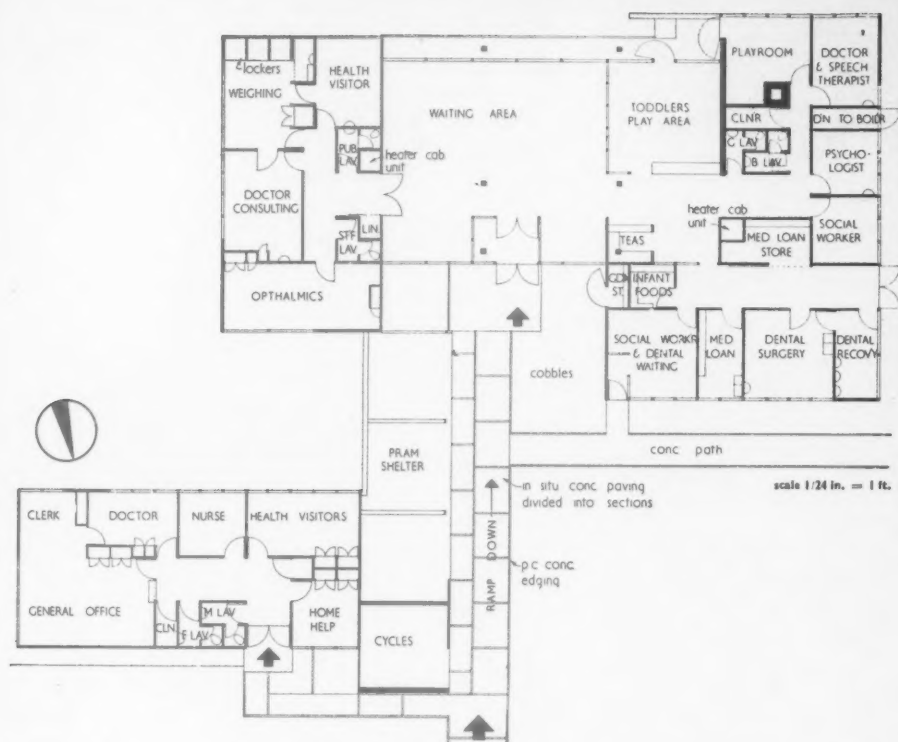
The Gooseacre Health Centre, Cole Green Lane, Welwyn Garden City, provides for a local population of 15,000, and houses a schools dental unit and the divisional health office, which serve the total population of the town. The site was a treeless open space with a slight slope; a hedge and some groups of shrubs and trees are now being planted. The Centre is constructed of prefabricated light-weight timber components on a 40-in. grid. The roof purlins are light plywood boxes spanning a maximum of 23 ft. 4 ins. and incorporating a ceiling finish. In the waiting hall, these are supported on 3-in.-thick prefabricated timber framed wall panels.

2, the dental and medical loan departments from the north-west.





3, terrace on the south side, paved with purple-blue quarry tiles.
4, main waiting area, with health visitor's desk and toddlers' play area beyond.



and laminated timber beams in the depth of the ceiling are supported on columns. External walls consist throughout of prefabricated floor-to-ceiling insulated pitch pine framed panels, with internal facing of $\frac{1}{8}$ -in. hardboard and external finish of either vertical cedar boarding or resin impregnated plywood sheets, both backed with building paper. 40-in.-square rooflights, aluminium framed with plywood egg-crate diffusers, have been inserted in circulation areas, stores, waiting hall and lavatories.

FLATS IN OSNABURGH STREET, LONDON, N.W.1.

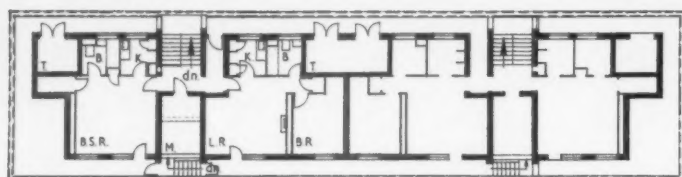
ARCHITECTS: DAVIES AND ARNOLD

ASSISTANT-IN-CHARGE: R. TUCKER

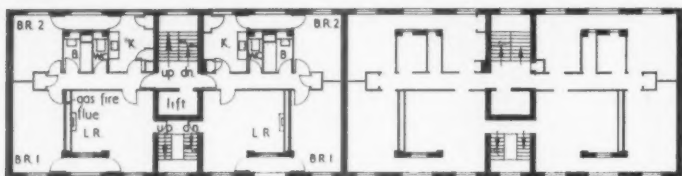
This 11-storey block is the first to be completed in Area 'C' of the 32-acre redevelopment area to the east of Regent's Park, between Albany Street and Hampstead Road, in the Borough of St. Pancras. It is steel-framed with brick and clinker block cavity external walls. The facing bricks are pale yellow and the balcony recesses painted terra-cotta colour. The balconies and square vertically pivoted staircase windows have thin projecting cast-stone frames. The inset panels under the balcony openings consist of single courses of pale blue glazed tiles. Dark purple bricks with black cement joints are used on the ground floor, to separate the upper floors visually from the ground. The roof is concrete hollow pot, finished with cellular screed and asphalt. The main entrance to the block from Robert Street is flanked by 2-ft. by 2-ft. by 2½-in. precast concrete facing slabs, with a brown and black marble chipping surface. Entrance doors are oiled teak with panels of wired glass. Internal partitions between dwellings, and round lift shafts where adjacent to dwellings, are 4½-in. brick and 4-in. block with 3½-in. cavity, especially suitable for sound insulation; and between rooms 3-in. clinker block. Living-rooms have gas fires with individual precast concrete flues concealed in the living-room/bathroom partition. Lift motor and tank rooms are in the penthouse floor, the lift stopping at the 10th floor.

5, the flats from the south-east. Robert Street runs across left foreground.

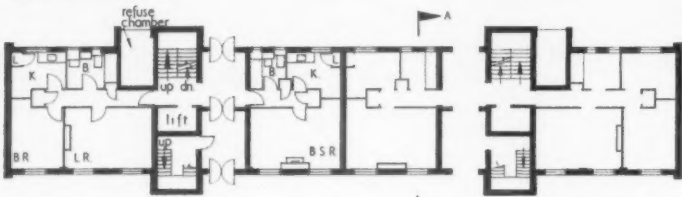




tenth floor

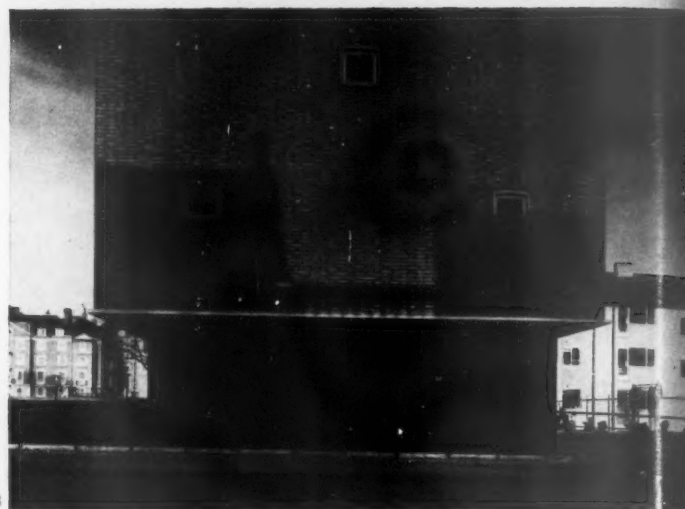


typical first to ninth floor



ground floor

scale 1/32 in. = 1 ft.



6, above, south end of block, with 3-storey block, forming part of the scheme, on right.



7, main entrance front from the north-east.

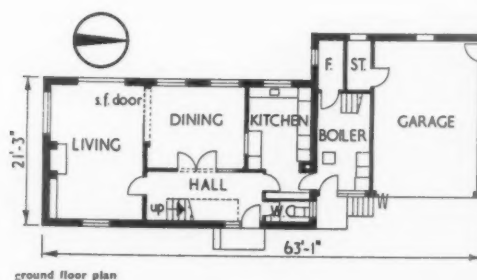
HOUSE AT MOOR PARK, HERTFORDSHIRE

ARCHITECT: JUNE PARK

This house is in Temple Gardens, Moor Park, off the golf course. External walls are 10½-in. cavity construction with an inner skin of clinker blocks. Internal partitions are mainly brick; those between two pairs of bedrooms are 2½-in. breeze blocks and 2-in. compressed straw blocks respectively. The ground floor has 1-in.-thick hardwood faced tile flooring with a sand and plastic base on screed and 6-in. concrete. The roof is of compressed straw slabs and timber trusses, with copper finish. All windows are double glazed. Heating is by hot-water floor panels under the whole ground floor, and radiators on the first floor. Total cost was £6,800.



8, hall and main staircase, with polished mahogany treads and handrail.



ground floor plan

BOOKS

ENGLISH PERPENDICULAR

SAINT STEPHEN'S CHAPEL AND ITS PLACE IN THE DEVELOPMENT OF PERPENDICULAR STYLE IN ENGLAND. By J. M. Hastings, Cambridge University Press, 1955, 42s.

Dr. Maurice Hastings has given us here a work of considerable importance, and in spite of the criticism we shall have to express it is only fair to say that it is an inspiring book, by a gifted scholar, and one which alters decisively the current views on the stylistic developments which took place in England between 1290 and 1340. St. Stephen's Chapel is the centre of interest and it is already a great advance to know precisely what this magnificent building was like at the various stages of its construction and destruction. But Dr. Hastings has done more than reconstruct the aspect and chronology of a vanished structure: the whole activity of the London milieu over a period of fifty years comes to life again, with all its many stylistic trends, and the picture reaches as far as Ely and Gloucester, where London masons were called at some stage, as far even as Cologne, Carcassonne and Avignon, where other versions of the international Court Art of the time were not without bearing on London practice. It is fascinating to follow the analysis of the London style, to see how its early adoption of the ogee curve heralds the outburst of the Decorated proper, but how it was checked from the start, in the Court circles, by a more restrained and regular method of design which soon developed into the Perpendicular style.

Why then formulate any reservations and criticisms? Simply because one feels that, with a little more precision and vigour on some decisive points, the picture could easily have been made even more complete and the demonstration more convincing.

One of the most disturbing facts is the absence of the original documents. Surely the references to the building of St. Stephen's in the Public Record Office could have been checked up since the end of the war, and they ought to have been published in an appendix. As long as this is not done, some doubt will remain as to the dating of certain parts at least of St. Stephen's Chapel. The nature of the work carried out under Edward III seems to be firmly established: the stone structure of the chapel was practically complete by 1328 and the roof was being prepared, but after 1330 the building was heightened by the addition of a clerestory, and it took another fifteen years before the roof was actually put on. Although Dr. Hastings does not state it definitely, it seems fairly obvious that no clerestory was meant when the upper cornice was built in the 1320s, and that two different schemes were followed one after the other. Originally the chapel must have been planned as a much lower building, with two rows of windows only

(one for the crypt, one for the upper chapel), instead of the four storeys shown on Van der Wyngaerde's drawing. It is also safe to say that the design of the upper cornice belongs stylistically to the first years of the century: the comparison with Prior Eastry's work at Canterbury is here decisive. But the panelling in the spandrels is likely to be a new feature of the 1320s. Anyhow one would have been happy to be sure that nothing more could be extracted from the rolls.

This ultimate lack of precision can be felt in other parts of the book as well. The term curtain-wall is used rather loosely and made to cover a number of different things, some of which were new, and some very much older. The long discussion on the clerestory stage is far from convincing and the drawing reproduced as frontispiece is contradicted both by the text and by the evidence on Plate 24. The comparisons with French works are very interesting, but could also have been more conclusive. It is unfortunate that Dr. Hastings has chosen the wrong document on the Sainte-Chapelle: the lithograph of 1839 shows how the lower part of the windows had been blocked up with plaster in the early nineteenth century; but earlier engravings show that the glass went originally right down to the sills. This disposes of one of Dr. Hastings' most impressive rapprochements. On the other hand a more complete picture of the pre-Perpendicular tendencies in France could have been outlined if the classic work of L. Schürenberg had been consulted. More important perhaps than St. Nazaire de Carcassonne is the choir of Sées, completed between 1280 and 1285, on the evidence of the stained glass, and certainly the choir of St. Thibault in the Côte d'Or, which is not later than 1320, would have afforded the best example for a comparison of the English and French methods of panelling.

If a close parallel were drawn between the systems of forms used in that period by the more advanced Gothic builders on both sides of the Channel, the originality of the English developments would become even more striking. It is remarkable that the battlemented cornice, the stylistic importance of which has rightly been stressed by Dr. Hastings, was eventually derived from wooden screens, such as those of Old Saint Paul's. Nearly all the features analysed by Dr. Hastings appear to have been transferred from wood into stone and to have come to the masons' yard through the intermediacy of church furnishings. The fashion for wooden vaults and its reaction on stone vaulting is no less typical of the English approach to architecture in that period. Gothic forms in England were being revised in terms of carpentry and woodwork, and this is what could not have happened in France, where stone enjoyed an undisputed moral primacy over every other material.

At any rate Decorated and Perpendicular must now be viewed as two parallel lines of development, and it is noteworthy that England was able to produce almost simul-

taneously two such different reinterpretations of the vocabulary of the Rayonnant which had been accepted as the lingua franca of Western architecture for about a generation. There is no doubt that the proto-Perpendicular of London and Canterbury was more advanced than the heavier decorated style of the provinces, but the difference cannot be expressed only in terms of surface decoration, not even of superimposed planes: the whole treatment of depth has to be analysed in all its aspects, including the constructional changes which alter its range, which flatten or hollow out its cavities. The flatness of the Perpendicular is inseparable from its thinness, and this is an aspect of the problem which may still have to be more closely considered.

Joan Bony

DESIGN IN GERMANY

NORMEN UND FORMEN. Edited by Dr. Wilhelm Braun-Feldweg. Published by Otto Maier Verlag, Ravensburg.

SCHÖNHEIT DER TECHNIK. Published by Verlag Gerd Hatje, Stuttgart.

Two more lavish German picture books on industrial design; two more collections of excellent photographs of familiar objects; two more prolix texts, full of philosophical analysis and earnest exhortation. One is left wondering who reads this spate, and what are the economics of German publishing that make possible so many similar productions.

To an English eye and ear these stunning photographs and sententious commentaries come dangerously near to building mountains from molehills. I say dangerously advisedly, since no one can be sure today that German competition will not overnight shatter our own security. Perhaps we should take these current manifestations of German *Gründlichkeit* more seriously than our natural distaste for the high falutin' would dictate.

There is no doubt that the Germans are in earnest about industrial design, particularly in their light engineering industries. Both these books concentrate on engineered products, with only passing reference to the craft-based industries and to handwork as they affect or inspire appearance in engineering. Both draw generously on foreign examples to point the lesson for German manufacturers. Both, of course, dwell lovingly on Olivetti. But behind it all is an admirable determination not to be caught napping in the post-war world.

Dr. Braun-Feldweg's book is the more serious study. He examines design from function, through production, to the market itself. He has an excellent section on case histories of design development, showing in one example at least the dangers of over-designing and the wisdom of leaving well alone in the middle stages—a situation that can be paralleled in this country too.

But, compared with similar American publications, these pages contain few examples of idle styling. They suggest that the old

Werkbund principles are still powerful disciplines and that German designers and critics are still more concerned with logic and economy in solving a problem than with the superficial glamour that intrudes wherever the impetus for design comes from the market rather than the factory.

The second book is a permanent record of an exhibition organized in 1958 by the Baden - Württemberg Landesgewerbeamt, which wisely put industrial design in the context of general reconstruction. It acknowledges the close connection between architecture and industrial design by opening with a section on new building techniques. Dr. Braun-Feldweg seems to have missed a point in not stressing this important link, for in Germany more than anywhere it is the architects who set the pace, not only through their own profession but as spare-time industrial designers.

Paul Redilly

THE VANISHING LANDSCAPE

THE MAKING OF THE ENGLISH LANDSCAPE. By W. G. Hoskins. Hodder & Stoughton, 25s.

Few professors are true countrymen: fewer countrymen are professors; but Dr. Hoskins, fortunately, is both, and so combines scholarship with physical energy and a most observant eye. He is thus particularly equipped to interpret for us the hidden language of the English landscape. The field is new, and it is his own: there are in the bookshops too many sentimental effusions on 'our lovely land,' too few guides to a real understanding of its structure and detail. Dr. Hoskins demonstrates (with a number of telling illustrations) how much its present aspect derives from the cumulative activities of its human inhabitants from pre-Roman times to the present day.

Man never ceases to write himself upon his surroundings. Some of that writing is faint now and difficult to decipher, but Dr. Hoskins provides the clues, and stimulates us to go out and discover its meaning for ourselves. Most of us at some time or another have puzzled over mysterious earth banks, apparently unrelated to hilltop fort or lowland causeway; inexplicable outcrops of worked masonry in grassy fields; roads that take a sudden right-angled turn for no discernible cause; villages without churches, and churches without villages; old towns built to a 'modern' plan, and much younger towns built without any plan at all. It is well worth paying twenty-five shillings to be given the key to all these mysteries—and many others—in keen and evocative prose ('New churches, new chapels, new bridges, new quays: the fifteenth century saw the sparkle or the golden warmth of new-cut stone almost everywhere up and down the country': here fifteenth-century England is given back to us out of the darkness of the past in one brilliant flash).

The book is also a forthright warning, for Dr. Hoskins, because he knows his England, knows too well what her inhabitants are doing to her now. Since the year 1914, he says, every single change in the English landscape has either uglified it or destroyed its meaning, or both. Man, once the minister

and husbandman of the land by which he lived, has lost his respect for it, and treats it now with a greedy and thoughtless contempt; no longer caring to chisel the record of his life upon it with loving regard for the material of which it is made, but choosing instead to proclaim his own puissance by blasting the story of his cleverness across its face with bulldozer and pneumatic drill. His contempt extends to the works of his forefathers, and so Bronze Age barrows are deep-ploughed out of existence, mediaeval lynchets flattened to give space for mechanised farming, rows of ancient and comely buildings destroyed to make room for concrete speedways. These things are condoned by our political rulers in the frantic illusion that all change is progress. Money talks: and the land is silent, biding its ultimate and terrible revenge. 'Barbaric England of the scientists, the military men, and the politicians,' says Dr. Hoskins bitterly: 'Let us turn away and contemplate the past before all is lost to the vandals.' It is the one mistaken note in this otherwise deeply perceptive book. We must not turn away, but must turn and fight, not only for our landscape but for our very lives.

Sylvia Sayer

Books Received

MAILLART. Max Bill. Girsberger, Zurich.
BUILDING SURVEYS. F. R. Huggins. Batsford. 30s.
SIMPLE PERSPECTIVE DRAWING. Arthur R. Brown. Crosby Lockwood. 6s.
DOCTORS' OFFICES AND CLINICS. Kirk & Steinberg. Reinhold. 96s.
VERSAILLES. Ian Dunlop. Batsford. 30s.
BOURNVILLE VILLAGE TRUST, 1900-55. 12s. 6d.
EGET HUS. Jens Møllerup. Arkitektens Forlag, Copenhagen. 19.50 kr.
THE EARTH IS MY CANVAS. Percy S. Cane. Methuen. 42s.

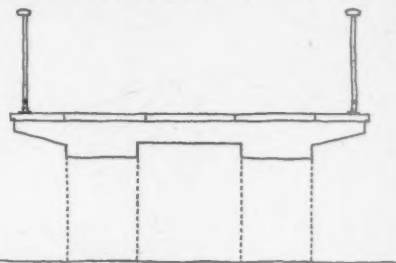
OBITUARY

DIGBY WYATT BRIDGE

It is sad to have to bid farewell to the bridge in St. James's Park. The future bridge, 1, facing page, may be unexceptionable—in fact it is not quite; for the three narrow arches so close to the water will block the view extending beneath it which is now a delight. It is strange that 140 ft. could be spanned a hundred years ago in one leap, whereas now it needs three. The future bridge will, however, no doubt be less costly to keep under repair than an iron bridge nearly a hundred years old. The date when the present bridge was built is indeed 1857, and it looks as if the centenary will be commemorated by doing away with the centenarian.

The present bridge, 2-5, has three qualities which might have recommended it for loving and respectful preservation. It is the only

early suspension bridge in London, it is an ideal piece of furnishing for the finest picturesque park of London, and it is the work of two distinguished men. Its engineer was James Meadows Rendel (1799-1856), famous designer of bridges, harbours (e.g., Holyhead) and docks (e.g., Grimsby). The St. James's Bridge was his last work. The architectural or rather



cross section of new bridge

ornamental enrichment was designed by Sir Matthew Digby Wyatt. He needs no introduction. He was responsible for the peculiar decoration inside Brunel's Paddington Station and for a number of unattractive buildings from Cambridge to Dublin and Calcutta. His chief title to fame is his share in the Great Exhibition of 1851 and his brilliantly clear-sighted exposition of the principles which ought to govern industrial architecture and industrial design. It is in connection with these that he explained what ornament in cast-iron ought to be and what it ought not to be. He described the disaster which occurs when 'the graceful honeysuckle of the Erechthion' is applied to cast-iron and recommended 'never to imitate in iron ornament peculiarly identified with stone.* And . . . 'It is a great mistake to imagine that a so-called "rich" cast-railing, a thing all spike, flower, standard, scroll and dog-rail, will make a poor building, or one destitute of ornament, look handsomer.†

How he wished to see ornament applied to cast-iron instead is not made so explicit in his writings, though he refers once to 'the conventionalities to be observed in the treatment of cast-iron' [Lectures on the Results of the Great Exhibition of 1851, Second Series, 1853, p. 243], but the St. James's Bridge is a paradigm of the use of cast-iron 'in the nature of the material'. Every stalk, tendril, leaf and flower is broadened and flattened. Ornament is confined to the spandrels of the pylons. The parapet is given but the simplest bolted trellis, flat and light as compared with the chains. Is it hoping too much that the Victoria and Albert Museum will secure for its Department of Ironwork one of the spandrels?

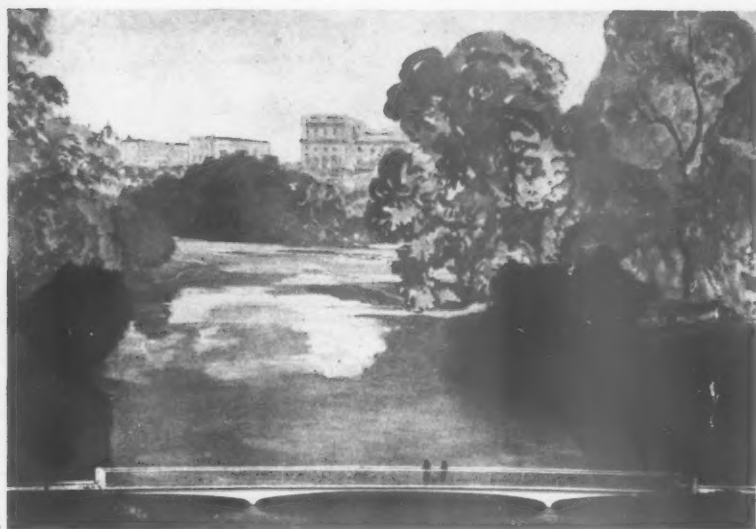
N.P.

* Specimens of Ornamental Art Workmanship in Gold, Silver, Ivory, Brass and Bronze, 1852, pp. XIV-XV.
† The Journal of Design and Manufactures. Vol. IV, 1850/51, p. 74.



elevation of new bridge, designed in the Ministry of Works





1

Above, model of the Ministry of Works design for a new reinforced concrete footbridge to be built across the lake in St. James's Park, replacing the present iron suspension bridge, which is the subject of an obituary notice on the facing page. Facing also are an elevation and section of the new bridge.



3



4



5

The present St. James's Park footbridge, built in 1857 to the designs of Matthew Digby Wyatt. It is being replaced because it has become expensive to maintain and so weak that it has to be shored up underneath on every occasion when large crowds are expected in the park. Left, a detail showing the cast iron ornament referred to by Dr. Pevsner (see also the cover of this issue). Above, the bridge from across the water showing the uninterrupted view beneath it; from the lake shore; and from the pathway approaching it.



THE LEINE SCHLOSS IN HANOVER

The problem of the town planner is more acute in Germany than in this country, since the extent of destruction due to the last war is more general and—a doubtful advantage—drastic replanning and rebuilding is a necessity. This raises controversies between those who wish to preserve ancient monuments for aesthetic or sentimental reasons, and those who look forward to building contemporary towns without much regard for historical tradition. The Leine Schloss (the palace on the river Leine) in Hanover is the focus of such a controversy.

Erected on the site of a Franciscan monastery, the palace was largely built in the seventeenth century. Plans for the enlargement and the restoration of the structure were commissioned from the chief architect and town planner of Hanover, G. L. F. Laves, in 1816. Further designs were added and the erection of new buildings continued until 1856. It is a token of the close links, cultural as well as political, between Hanover and this country, that Laves was made an Honorary Corresponding Member of the RIBA in 1837, the year when its Royal Charter was granted.

Although the style of Laves' architecture is unthinkable without French prototypes, his classicism has many Georgian features and the neo-Gothic form of the Leine Schloss Church, based though it is on medieval remains, clearly reveals an



1

English influence, especially in the vaults. The inclusion of richly ornamented stucco capitals and the roundels by Bandel, representing the life of Christ, are, how-



2



3

1, the ruined Leine Schloss. 2, the church as restored and redeccorated by Laves, 1835-39. 3, the church as it is now.

ever, typical of their German origin. They illustrate the transition towards a Romantic interpretation of architecture.

The building has been gutted and stands in ruins although the walls appear sound. It would therefore be possible to incorporate part of the historic structure in an uncompromisingly contemporary work, as has been so successfully done in the past.

In fact, a competition for the erection of the Houses of Parliament of Lower Saxony was held in 1954, the projected

site being that of the Leine Schloss. It was won by Professor Dieter Osterlen; his design preserves the external walls, whilst the interior is to be rebuilt. Two new courtyards and a new hall for the Landtag will be added in contemporary style.

H. Rosenau

Note: A good summary of the history of the Leine Schloss will be found in A. Nöldeke: Die Kunstdenkmäler der Provinz Hannover, Stadt Hannover, 1932.

I wish to thank Dr. H. Wolff for his assistance in providing photographs.

SOANE BARN

Warwick Road, Solihull, is one of those long thoroughfares where the numbers of the flanking houses mount up to four figures. The village itself has a nucleus of ancient buildings, but as you leave it and strike SSE in the direction of Warwick, the residences on either side fall into the category which estate agents call 'desirable,' and which were for the most part put up between the two World Wars. It is, then, with some surprise that one eventually arrives at No. 936 and discovers it to be neither a house nor a shop, nor even a garage. It is, in fact, a sturdy 'barn,' what is more a barn in the Doric

order, and what is yet more a barn built from a design of Sir John Soane.

The ground on which this unusual building stands once formed part of the estate of Henry Greswold Lewis for whom Soane had in the 1780's made considerable additions to Malvern Hall, on the outskirts of Solihull. In his accounts for this work Soane added a note that in 1790 he supplied his client with a design for 'a



barn à la Paestum.' There is no clue as to why Mr. Lewis should have wished for a Greek Doric barn. His house was a rather uninspired example of late seventeenth century building, enlarged by Soane in a prosaic manner. Perhaps the suggestion came from the architect, recalling his memorable excursion to Paestum in 1779 when he measured the remains of the three famous temples and made sketches of them in a notebook which survives. Under the influence of this visit, a number of his student designs underwent a sudden metamorphosis from Roman to Greek Doric, for which, as we know from his Royal Academy Lectures, he had an unbounded admiration.

Translated into red brick, with a timber entablature, the Solihull barn reflects Paestum in spirit rather than in fact, but certainly there could have been no more appropriate inspiration than the Temple of Ceres for this small building designed as a store for grain and hay, and constituting the first of Soane's essays in Greek Doric to be executed. No longer required for its original purpose, it now serves as a craftsman's studio for an appreciative occupant.

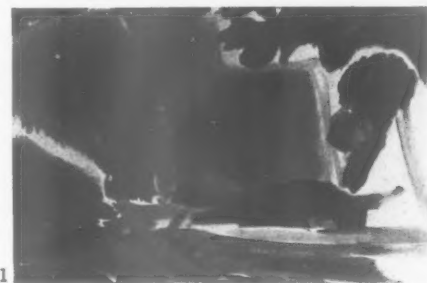
Dorothy Stroud

EXHIBITIONS

The artists whose work will be exhibited in the British pavilion at this year's Venice Biennale are the painters Ivon Hitchens, John Bratby, Edward Middleditch and Jack Smith, and the sculptor Lynn Chadwick.

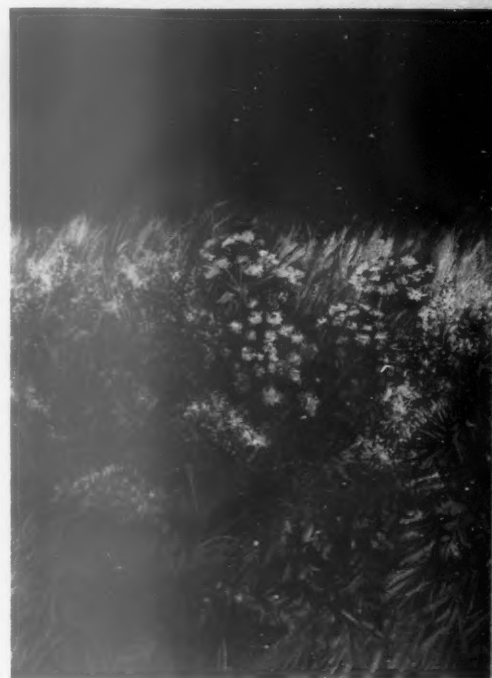
Hitchens and Middleditch have had London shows this season; the others contributed to the Contemporary Art Society's exhibition, 'The Seasons,'

held at the Tate Gallery. The Hitchens exhibition was held at Gimpel Fils. There were only seven paintings, ranging in date from 1945 to 1955, but they were all of the finest quality, and gave off so much sweetness and light that I found myself hoping that a few of the confused and unsuccessful works would creep into the Biennale selection to give it an edge. At his best, Hitchens paints such pictures as 'Summer Sky and Fields,' 1, in which he translates landscape into a flat pattern of colour that reads as space. It is the same marvellous paradox that informs the greatest works of Matisse and Picasso, and even after noting that Hitchens sometimes cheats a little and allows linear perspective to determine the shapes of his paint patches, it would still be possible to call the Gimpel selection a group of master-



pieces if it were not for the fact that his colour patterns have to be almost sugarily harmonious before they become spatially lucid.

A number of the still life arrangements in the recent Middleditch show at the Beaux Arts Gallery (particularly those in which flowers were used as a lyrical fuzz in a mundane setting) seemed to me to be calculated effusions on the level of the moister pop tunes, but the huge picture called 'Summer Landscape,' 2, a deadpan view of a field of cow parsley, is a much more compulsive work, and, apart from the timidly conventional addition of a strip of sky, its intransigence sets it apart from the course-grained, sentimental picture-making in which Middleditch specializes. This picture is a brilliantly successful vulgarization of Francis Bacon's ironical demonstrations of 'a feeling for landscape' and Jean Dubuffet's dadaistic 'bits of ground.' It is hypnotic and enveloping, and if Middleditch has any of the intellectual curiosity of the innovator, he should be able to push this kind of painting to a point where it commands audience-participation almost as effectively as the cinema.



The painter Frank Auerbach, another exhibitor at the Beaux Arts, is making contributions of a different order to the 'bits of ground' school. Unhappy human faces and desolate building sites are adumbrated in the substantial oblongs of paint which for want of a better word have to be called pictures, 3. But the images are only faint reflections of the misery exhaled by the paint itself—a thick funeral sludge which has sullenly settled after being subjected to much kneading and stirring. It is as if the artist had been groping through this fearsome substance for something precious that he didn't expect to find. It is action painting brought to a standstill, play-therapy considered as the last illness; a frightening expression of estrangement. I cannot imagine where Auerbach goes from here.





4

If 'Summer Field' by Middleditch and the splendid evocation of summer, 4, by Alan Reynolds, exhibited at the Redfern Gallery had been available for the CAS exhibition dedicated to the seasons, they would have stolen the show from the abstracts. As it was, some cool and handsome abstracts bearing wintery titles, especially those by William Scott and Paul Feiler, were outstanding in a not very distinguished miscellany.

Bratby and Jack Smith, like Middleditch, paint remarkably well when they are in the grip of a compulsion to shove a bit of the world under our noses, but their self-conscious attempts to tackle the theme of winter in the CAS show resulted in very poor works. Jack Smith sent in a kind of solemn pastiche of Victorian narrative painting, with people under umbrellas hurrying past a mountain range in a snowstorm. Bratby painted a picture of people warming themselves at a stove which was like a cover for an American family journal except that the faces had gone sour and that the colour made everything look as sore as the behind of a mandrill. Victor Willing's 'Winter Machine' was another essay in melodrama, depicting a blood-red tractor in a snowfield, with a man-shaped plume of smoke in the driver's seat. I am wondering if it was intended to be an up-to-date version of one of the four horsemen of the Apocalypse. Patrick Heron, on the other hand, tried hard to turn a pretty view of a Cornish harbour into a 'tachist' abstract, but it remained obstinately picturesque. Some of the sculpture was notable. I particularly liked a torso by Reg Butler, an enchantingly comical group of three clamorous figures by

Kenneth Armitage, impertinently labelled 'The Seasons,' and a small bronze by Lynn Chadwick, 5, which even succeeded in being pertinent. In the photograph, it looks as if a member of some formalist Ku Klux Klan were throttling a natural

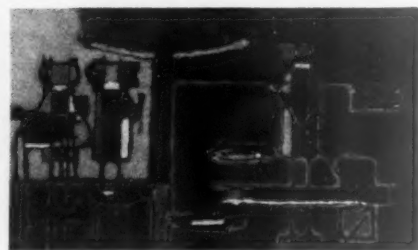


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object, but the work itself is an interesting sculptural variation on the theme of one of Graham Sutherland's most famous pictures, 'Gorse on Seawall.'

Stefan Knapp is one of the oddest cases in contemporary art. His symbolic designs report the blessed uneventfulness of an earthly paradise where men, animals, fish, birds and trees are practically equal, and the only noticeable difference between humans and the others is that men have the initiative to go on short journeys

for the pleasure of being welcomed on their return. The artist's subject matter and eccentric figurative system have not changed for several years, and one pre-



6

sumes that he considers the expressive aspect of his task to be completed, leaving him free to become the artisan-follower of his own pictorial formula. He is now wholly concerned with the task of finding more luminous and more durable ways of repeating himself, and the pictures in enamels, 6, which he recently exhibited at the Hanover Gallery, some of them fantastically large for so exacting a medium, are remarkable examples of technical virtuosity.

Robert Melville

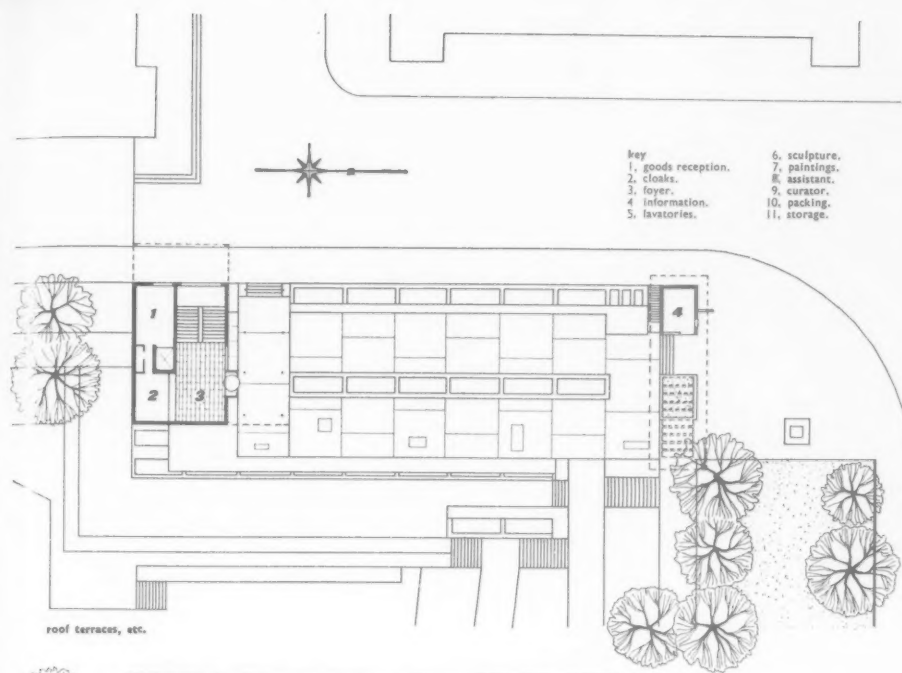
PROJECT

A GALLERY FOR EDINBURGH

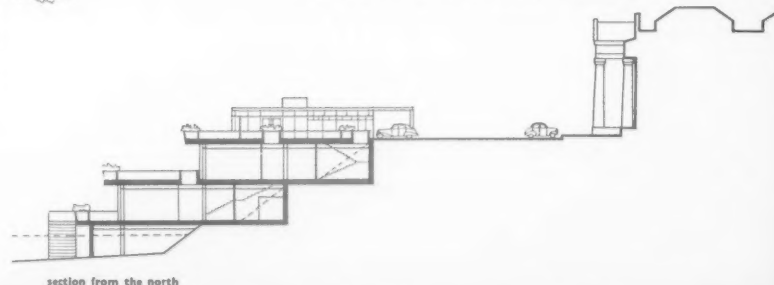
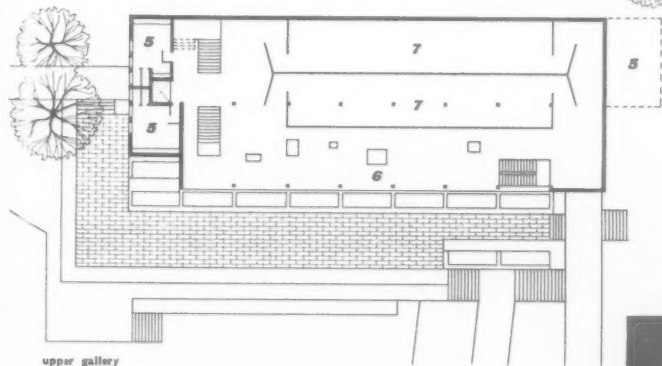
London is not the only city in which the shortage of galleries where temporary art exhibitions can be held is becoming more and more serious. In Edinburgh the same shortage is being felt, especially during the period of the Festival, and proposals are being put forward for such a gallery in Princes Street Gardens. It would perform much the same role in Edinburgh as the gallery that is one day to form part of the annexe to the Royal Festival Hall in London.

It is desirable that any new gallery should be closely linked with the National Gallery of Scotland and the Royal Scottish Academy and the architect of this scheme, Mr. Alan Reiach, has planned his building so that it would be part of the group already formed by these two splendid examples of the Greek Revival, but has taken care, 1, to avoid disturbing one of the most famous views of the Castle, which has these two buildings as its foreground.

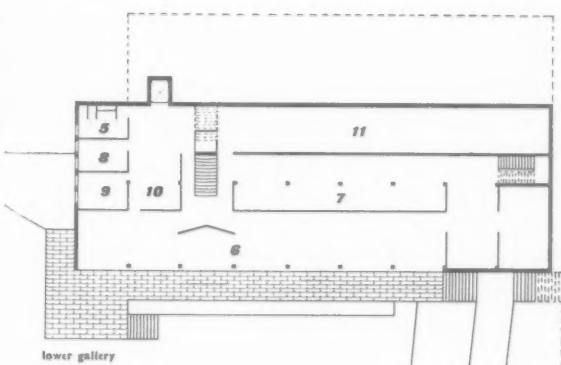
He has sunk his gallery below road level, 2, so that its part in the landscape is simply that of a series of stepped garden terraces. Access would be from the present roadway between the National and RSA



1, model of the proposed gallery from Princes Street.
2, looking down on the roof, which extends the road-
way in front of the National Gallery of Scotland.

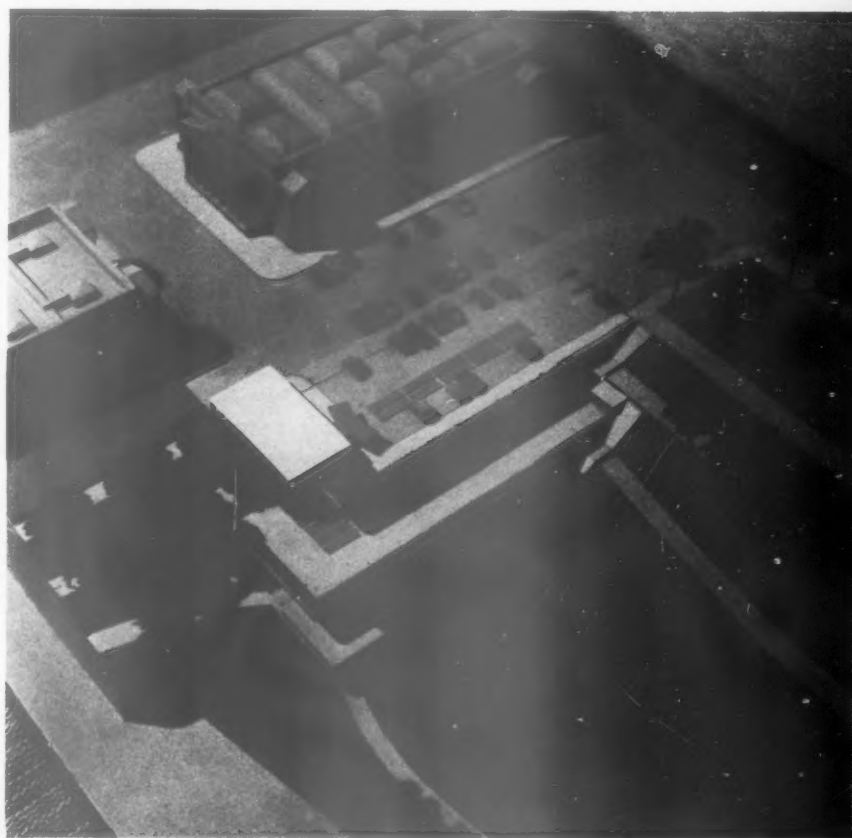


section from the north



10 0 25 50 75 100
scale of feet

Galleries or from Princes Street across the roof terraces, which might be used for displaying sculpture. The public galleries (which have an area of 15,500 sq. ft.) are planned at two levels, with their main windows facing east across the gardens, avoiding direct sun for most of the day. The total cost is estimated at £160,000.



OUTRAGE

RECVLVER IMPAIR'D AND RESTOR'D

Subtopia is at its cruellest when it gets to work on somewhere which had character of its own, and at its most frightening when it acts, not through a series of disconnected objects dumped down at different times by different bodies, but all at once through one mass-produced sub-human flood. The combination of these two makes the journey to Reculver an ugly experience. You see it from the main Margate road apparently alone in the green wedge between Whitstable and Herne Bay—long may it stay green. You go down the only road to it into a faintly disturbing landscape that is both intricate and large



scale at the same time, the perfect overture to the pair of enigmatic Thanet-Early-English towers. And then you turn the corner and see the towers themselves—and the sea of caravans in front of them, 1. They have no more reality than if they were painted on the walls of a caravan showroom to advertise Olde Englande; and one can't even try to turn a blind eye, because this is the only way into Reculver. To make matters worse, most of this is municipally owned—that is, there isn't even the understandable if not justifiable impulse of private profit to account for

the vandalism. In fact, Herne Bay UDC could have better put the caravans anywhere else along their stretch of messed-up Thanet coastline than in the one place which had character of its own.

That is Reculver Impair'd all right; but it isn't everywhere that contains the evil and its remedy simultaneously. If you come to it along the sea wall (wearing a comprehensive set of blinkers for the landward side) you find Reculver Restor'd, or all the character put back again, 2. The towers are liberated and answer the clean angular sea wall, no longer a back-cloth but the main component. The parts of the landscape start to speak to one another instead of sitting it out in silence; Reculver waiting for the grisly farce to end and the caravans and their inhabitants never knowing that there is anything wrong at all.

The irony is that the sea wall, built after the 1953 floods, is probably newer than some of the caravans; the moral is that the landscape has far more to fear



from the misplaced too-human herd instinct than from inhuman technology, as Kenneth Browne is demonstrating on page 309 of this issue. But where is the man in the planning chain who can survey the area in a topographical, not administrative, sense and say 'this would do less harm at X, not Y'? and where is the research team behind him at the Ministry to find out, by a close and affectionate study of present causes and effects, what sort of thing will fit into which landscape? They don't exist, at the moment, and they ought to. They need only be advisory, because there are enough executants in the planning system already, and because most committees will listen to reason, even on visual matters, if it is put over in a common-sense way. It may help to prevent England being ruined by the *amour propre* of local government: at the moment we can literally move mountains, if we want to, but we can't shift the UDC boundary.

Ian Nairn

DECORATION

GOTHENBURG MURAL

Outdoor murals are usually thought of as more suited to the brilliant light of the south than to the grey light of northern countries, but here is a very successful example from Gothenburg, Sweden, executed in coloured marbles on an outside wall of a building forming the south side of a square at Hogsbotorp, one of the new neighbourhoods on the fringe of the city.

The building is the Medborgarhuset (citizens' house), and contains a library, meeting rooms and shops. The architects for the scheme are Brolid and Wallind.

The mural itself is the work of the painter Endre Nemes. It is 30 ft. high and 25 ft. wide. About 50 different types of marble are used, ranging in colour from white to yellow, green and red, but with a wide variety of greys predominating. The cost was about 50,000 Swedish Kroner. The original design was made to a scale of 1:10, and the final design worked out in sections to full size. The sections were used as templates for cutting the marble, which is fixed to a light-weight concrete wall surfaced with a steel fabric. The marble pieces are held by bronze cramps hooked to the steel fabric, and the cavity grouted in with waterproof cement. The joints of the marble are tight-ground. It took two men four months to fix the mural.

Endre Nemes was born in Hungary in 1909 and has worked in Scandinavia since 1938. He has been principal of the



Valand School of Art in Gothenburg since 1947. During the last few years he has been working mainly on large scale murals in stucco lustro, enamel and marble. S.S.T.

CRITICISM

BUILDINGS FOR THE FOREIGN SERVICE

The buildings that one country puts up for the use of its officials in another can be regarded as advertisements of its architectural taste and enterprise

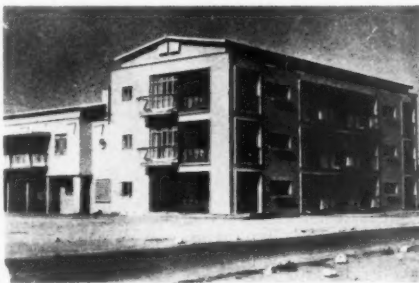
and must therefore be of the highest possible standard. In the REVIEW for October, 1955, some of the latest American buildings of this kind—embassy offices and residences—were illustrated, and the enterprising character of their architecture was remarked upon and contrasted with the lack of enterprise generally shown by the British.

Since then the policy of the State Department has gone from strength to strength; witness the intelligent selection of competitors (and assessors) in the limited competition for a U.S. embassy in Grosvenor Square, London, resulting in a dignified but uncompromisingly modern winning design by Eero Saarinen, and the news that a new U.S. embassy in Athens is to be designed by Walter Gropius.

How do the latest British developments compare with these? Certainly it can be said that the British Foreign Office has improved its outlook considerably since the time (only ten years ago) when it thought a neo-Palladian building suitable for Rio de Janeiro. Its policy is less bold than that of the Americans, who seem to be commissioning a building from each of the most progressive American architects in turn (how stimulating it would be, both

to our self-confidence at home and our prestige abroad, if new British foreign service buildings were to be commissioned from, say, Lubetkin, Powell and Moya, the Architects' Co-Partnership, Basil Spence and Farmer and Dark); while the British buildings are designed by the Ministry of Works. But whereas a few years ago this would have been a depressing statement, an encouraging quantity of worthy and conscientious architecture has lately come out of the Ministry's architects' department. At the risk of sounding patronizing these are the two adjectives one must choose to apply to the Ministry's two latest designs for the foreign service: a group of buildings, just completed, at Bahrein and a larger group, still in the project stage, at New Delhi.

They are both in the tropics, where the Ministry's efforts to give the buildings an architectural character based on regional traditions have the best chance of succeeding: for small windows punctuating expanses of white walls, screen-walls patterned with openwork grilles and widely projecting eaves and porches them-

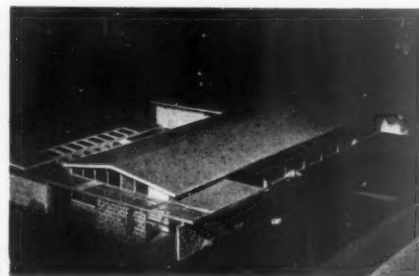


2

selves constitute an idiom which, handled with reasonable sensitivity, seldom fails to achieve interest and even charm. The office building in the Residency compound at Bahrein, 1, has considerable charm. The staff flats nearby, 2, have not; the architect has been able to rely less on regional traditions, or regional ways of

using materials, and has been confronted with the problems of proportion and articulation common to building everywhere. These have been solved somewhat clumsily, and the effect is not helped by overemphatic detailing in a country of strong sunlight, where the most delicate of modelling is sufficient to tell; indeed wall texture is often detail enough by itself, but texture is a quality these Bahrein flats seem to lack altogether.

The British diplomatic compound at New Delhi contains, besides offices and several blocks of flats, a High Commissioner's residence, a community centre and a sick-bay. The layout, in a park-like

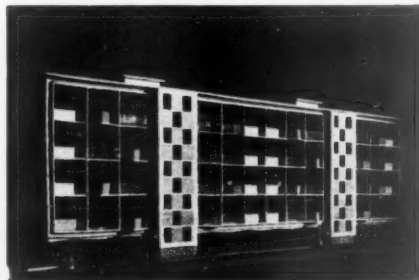


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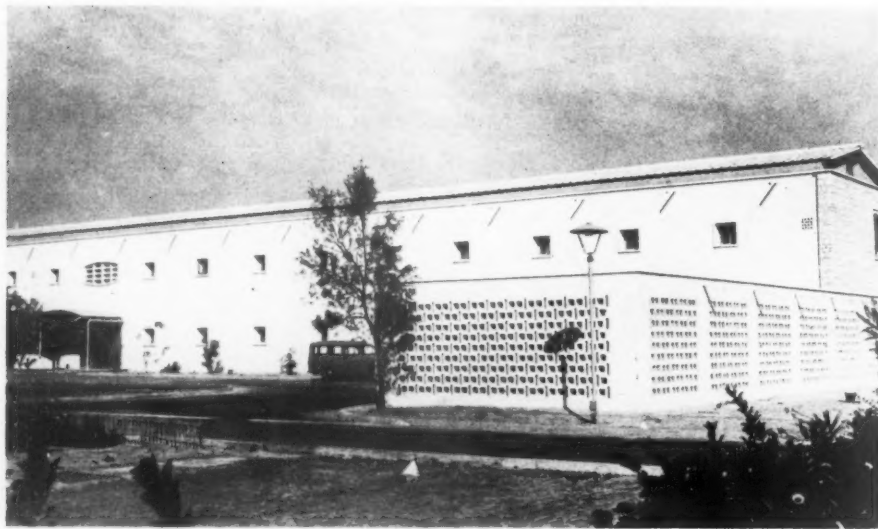
landscape, has been well devised to give a degree of formality and seclusion to the residential parts, and of the individual buildings, again, the most successful are those which rely most on traditional tropical building practice. For example, the sick-bay, 3, with its low-pitched overhanging roofs, shares the simple but satisfying character of the ubiquitous verandah tropical bungalow, and the openwork screen-wall and pergola treatment promise to serve as a pleasant foil to the deeply shadowed areas behind them.

The New Delhi compound will be dominated, however, by four multi-storey blocks of flats, 4. Displayed, as they are here, in model form, they appear little less heavy handed than those at Bahrein; but models are an unfair test; the proportions are not disagreeable, and if the detail is handled, and the proposed variety of facing materials chosen with restraint, the flats (which, it must be remembered, are conceived as a relatively impersonal element in a complex, elaborately landscaped scheme), could be a worthy contribution to modern architecture abroad.

J. M. Richards



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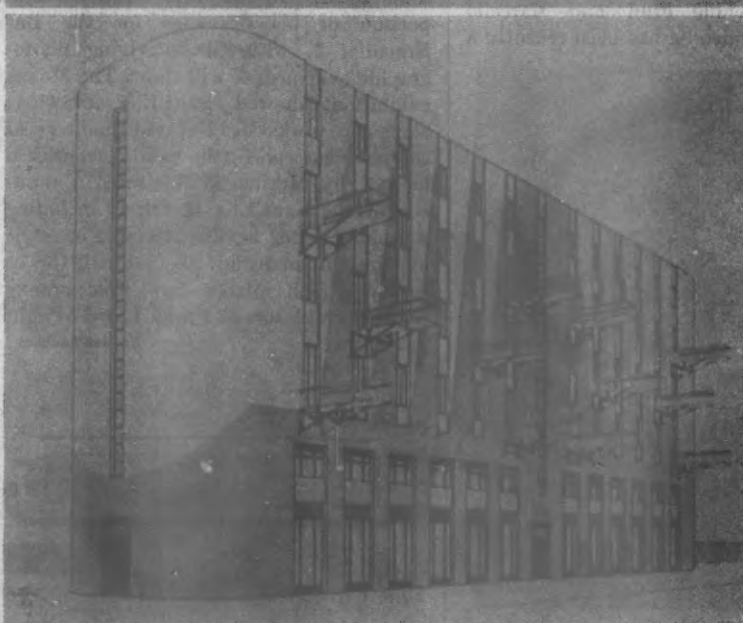
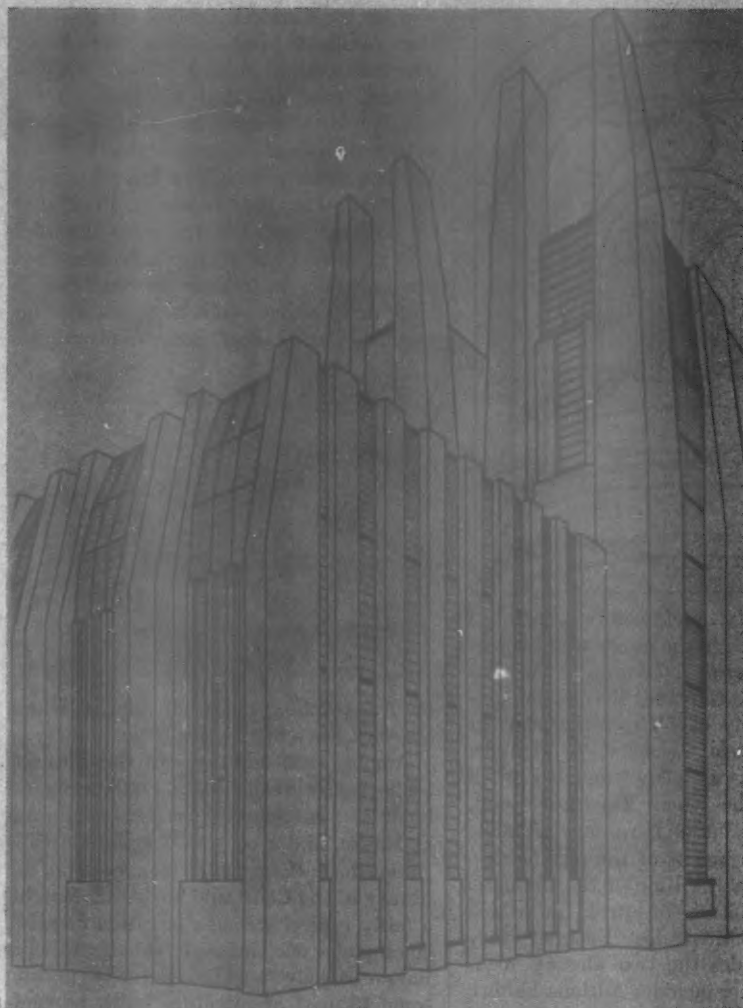
FOOTNOTES TO SANT'ELIA

The article on Sant'Elia which appeared in the *Architectural Review* for May, 1955, proved to be the first swallow of a Santelian summer, in the course of which large and valuable contributions were made to the published material both on the architect himself and on Futurist architecture in general. Thus, in the July-August issue of *Casabella*, Ernesto Rogers devoted much of his customary philosophical opening essay to a consideration of Sant'Elia's place in the tradition of Italian modern architecture,



and supported his reflections with a magnificent reproduction of a Sant'Elia drawing in colour.

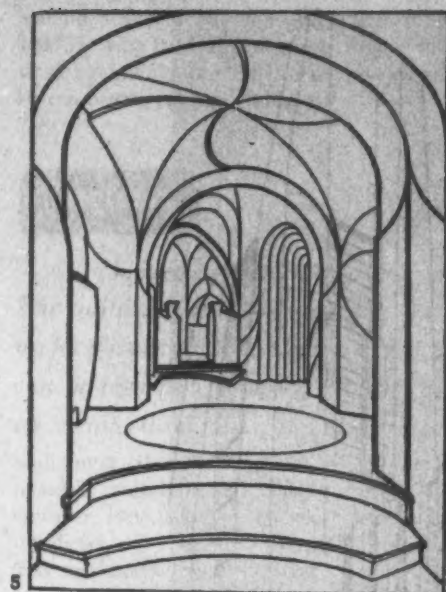
In the equivalent issue of *L'Architettura*, Francesco Tentori published and discussed two early projects by the architect from his pre-Futurist phase, a villa of 1911, and a competition design for the cemetery at Monza, of 1912. Of these, the cemetery project, 1, offers the first conclusive evidence of a debt to Wiener Werkstätte Art Nouveau, while the villa, 2, seems to suggest a hitherto unsuspected debt to French suburban domestic design of the eighties and nineties. In the same issue Leonardo Mariani undertook the heroic



but valuable labour of publishing every Sant'Elia drawing that could be found, and the result, though it seems to contain some inaccuracies of cataloguing, nevertheless contributes a fundamental corpus of published material to further Sant'Elia

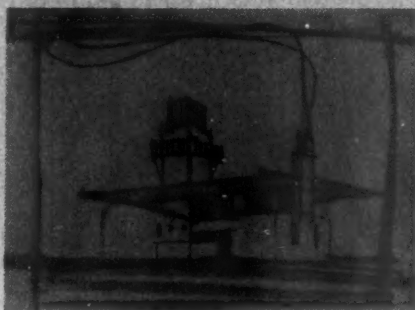
studies. And in a later issue still (No. 5) Mariani has produced something conspicuously missing from the Sant'Elia corpus—plans.

But the most interesting contributions to an increasing knowledge of Sant'Elia



(and of futurist architecture generally) came in an article in the rarely seen Lugano magazine *Rivista Tecnica*. To its September issue Giovanni Bernasconi contributed a study of *L'Espressionismo nei Disegni di Mario Chiattonne*. A Ticinese, Chiattonne was a fellow member with Sant'Elia of the *Nuove Tendenze* group, and the first value of Bernasconi's article is in its establishment of the membership of the group at the time of the *Famiglia Artistica* exhibition of 1914, at which Sant'Elia exhibited his Futurist City drawings. Besides the two already mentioned, the roster includes Adriana Fabbri, Dudreville, Achille Funi—and Marcello Nizzoli, who (since he has been recently a

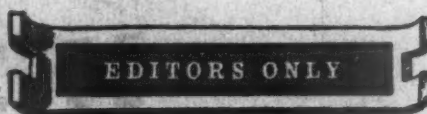
written by Marinetti around quotes from the catalogue preface to the *Nuove Tendenze* exhibition, and not by Sant'Elia himself, can still find no proofs more positive for this assertion than the Marinettian flavour of the prose style. However, this is a minor complaint when set against the fact that the article is illustrated by no fewer than ten otherwise unknown drawings by Chiattonne, which bring out not only his dependence on Sant'Elia in large or visionary projects, 8, but also his originality and independence in his designs



for free-standing blocks of flats, 4, where his work has a highly prophetic quality.

Among 1955 additions to the Futurist bibliography available in London should be noted a catalogue of the 1980 exhibition at Monza, and a copy of Virgilio Marchi's *Architettura Futurista* (1924), both in the library of the Courtauld Institute. Marchi, a fairly typical second-generation futurist, commands our interest chiefly for his unique achievement in actually getting some futurist architecture built, as comparison of his drawings for the Bar Braglia, 5, with the surviving photographic evidence, 6, will show. The Monza exhibition showed Sant'Elia drawings alongside works by Futurist painters of the post-war epoch; the catalogue, with a preface by Marinetti, illustrates a number of the Sant'Elia sketches, including a project, 7, for a villa—datable on style of draughtsmanship to late 1918 or earlier—which places Sant'Elia among the first emulators of Frank Lloyd Wright in Europe.

Reynard Benham



The Camouflage Exhibition staged recently at the Imperial War Museum must have prompted some at least of the many visitors who wander through these muddled, and at times almost unbearably touching,

galleries to regret the peacetime disappearance of this bizarre yet useful activity. Like the barrage balloon, camouflage was a certain war casualty. Few industrialists really liked to see their factories dressed in multi-coloured modesty-vests, and no government department, alas, seems willing, once the need for security has ceased, to spend money on protective colouring. Thus when peace came the aerodromes and camps, the factories, quarries and dumps emerged as eagerly as demobilized soldiers into their red, pink and grey 'civvies.' What an opportunity missed.

We all know, of course, that camouflage is not magic. Strange and violently contrasted patterns confer no mantle of invisibility upon the objects upon which they are applied. But the principles of camouflage, intelligent and carefully considered siting, the playing down of over-assertive forms by the elimination of light-reflecting surfaces, the use of disrupting patterns to destroy—or, if preferred, to emphasize—certain shapes, are surely splendid weapons in the hands of those fighting Outrage in our countryside.

Nor need its use be entirely negative in effect. In imaginative hands camouflage could also come to the active rescue of some of the most difficult areas of subtopia, or even in the more boring urban centres. Here, in places where the buildings are neither distinguished enough individually to stand up for themselves, nor disciplined enough to form a quiet background, camouflage used to create accents or to emphasize different materials, planes or changes of direction is full of the most promising possibilities... familiar enough in interior design or in individual buildings, but never yet explored upon a wider scale in the street or landscape.

It would not of course be popular with architects—notoriously touchy about their own monuments—yet even they, if they were honest, would probably admit that in designing any building they use without shame the devices of concealment, disguise, displays of false strength or disrupted surfaces, and logically they should not resist the same devices when intelligently applied in the interests of civic coherence or general amenity to groups of buildings.

Camouflage, the instructors used to say, is visual warfare, defensive or offensive as the circumstances may demand. Visual warfare is what the AR has been fighting for as long as its readers can remember, and with Subtopia still on the march this is not the time to get out of battle-dress. Nor is it the time to lay aside or reject so useful a weapon as camouflage when wielded, as Churchill used to say of the Home Guard pike, by a resolute man.

Rugh Carson

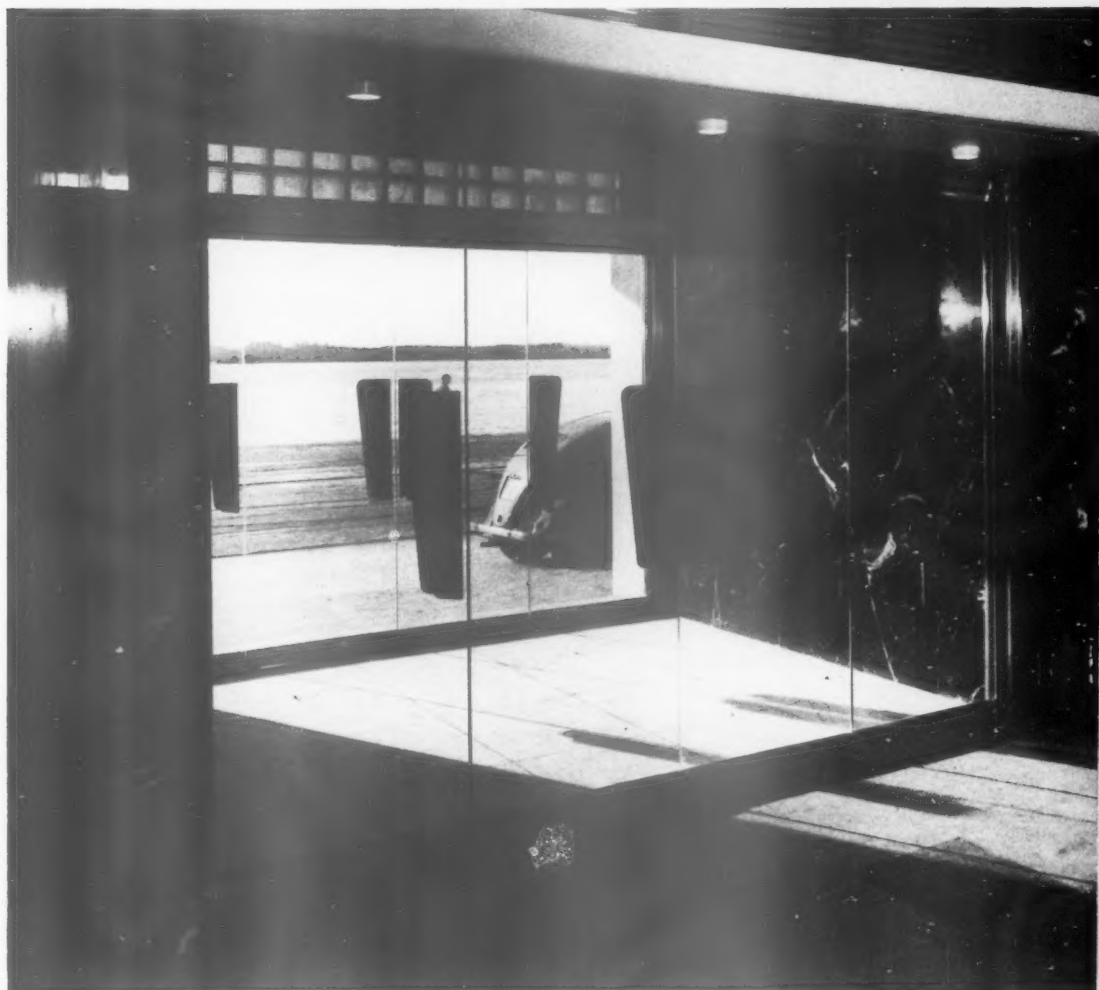


collaborator of Bernasconi on the Olivetti building in Milan) is the presumable source, apart from Chiattonne himself, of an eye-witness quality in Bernasconi's writing. For this reason it is disappointing that he, who reiterates the story that the Manifesto of Futurist Architecture was

SKILL

A MONTHLY REVIEW
OF BUILDING TECHNIQUES & INDUSTRIAL DESIGN

- 1 interiors
- 2 design review
- 3 techniques
- 4 the industry



1, looking outwards over the quay and Southampton Water, through the double-glazed doors of the passenger hall.

1 INTERIORS

PASSENGER WAITING HALL,
SOUTHAMPTON

*Designers: Heal's Contracts
Designer-in-charge: A. W. Skeels*

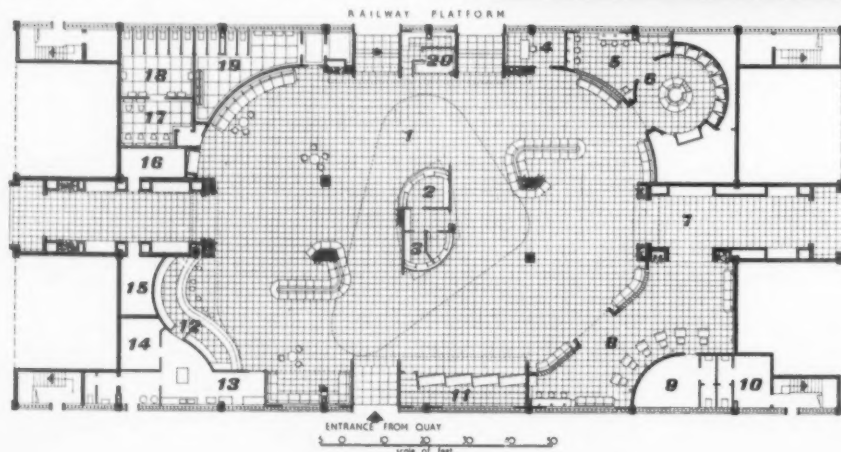
The new passenger and cargo building is on the site of an old transit shed at 102 Berth in the New Docks, Southampton,

which was destroyed by enemy action during the last war, and is primarily for use by inward passenger and cargo traffic carried on the mail liners of the Union Castle Line on the South African service. It comprises two floors: the upper of which is entirely a working area for the handling of cargo, the ground floor being occupied by the waiting hall and its ancillaries.

The main hall is panelled throughout in

natural Honduras mahogany, relieved by flanking columns of Genoa marble. The four main free-standing columns to the hall are also clad in Genoa marble. The recesses are panelled in Kevasinga wood vincer, and on the buffet, ticket and agencies' stands and bookstall, natural straight grained elm and teak have been used. Flooring throughout is of $\frac{3}{4}$ -in.-thick grey linoleum tiles, relieved with random tiles in the same colours as the furnishing fabrics. Seating around the walls and round the columns is covered in hide. The lighting is provided by flush louvred fittings in the lower level ceiling and by concealed cold cathode trough to the higher level centre section.

The panelling in the east and west vestibules is in natural straight grained elm, with display boxes of mahogany and grey wacerite inset into the walls. Lighting is from concealed tubes behind the panelling and floating canopies carrying tungsten and cathode lighting. In the entrances to the quay and railway platforms the walls are clad from floor to ceiling in Genoa marble and the floors are in dove-grey terrazzo. The panelling of the immigration hall is entirely of Honduras mahogany. The ceiling colour is pale lime, and the flooring is of $\frac{1}{2}$ in. dove grey linoleum. The deep texture curtains are pale turquoise blue. Console desks and stools for use of the customs authorities are of limed oak; the wall seating is covered in dark blue hide. The telephone hall is panelled throughout in slatted teak, and telephone boxes are in teak and sheet laminated plastic. The circular seat has a red hide covering. The writing room is panelled in weathered sycamore; the writing tables, which are of weathered sycamore with inset black hide tops, are cantilevered from the wall on metal brackets. All doors



2, the passenger waiting hall with bureau-de-change in the centre and, on left, the entrance from the quay shown in 1 overleaf. 3, one of the hide-covered seats in the centre of the hall, with the screened writing-room and the telephone room beyond. The columns are faced with Genoa marble.

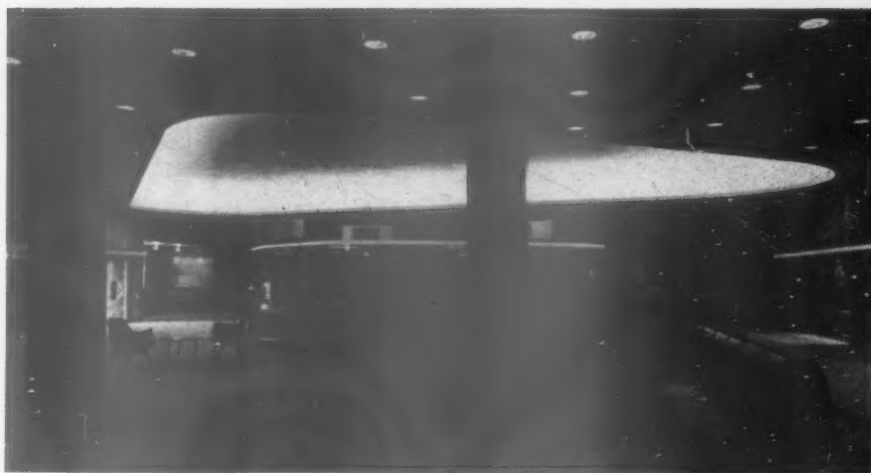
- key
- 1. waiting hall.
 - 2. rail tickets.
 - 3. bureau-de-change.
 - 4. control room.
 - 5. writing room.
 - 6. telephone room.
 - 7. vestibule.
 - 8. immigration room.
 - 9. office.
 - 10. search and interview.
 - 11. Union Castle Line tickets.
 - 12. buffet.
 - 13. kitchen.
 - 14. stock and cellar.
 - 15. switch gear.
 - 16. store.
 - 17. ladies' room.
 - 18. ladies' w.c.
 - 19. gents' w.c.
 - 20. bookstall.

are of armour plated glass, hung in stainless steel and mahogany frames, with handles of Bombay rosewood. Thermostatically controlled pyrotechnic cables in the floor provide the heating, which is augmented by a re-circulating air trunking system under the seating. The mural on the north-west wall was painted by John Hutton on 12 plywood panels, with a total area of 24 ft. by 8 ft. 6 ins., and represents scenes from 'The Lusiads.'

Heal's Contracts, Ltd., in designing this interior, worked to the general requirements of the Docks Engineer, J. H. Jellett, while the architect to the British Transport Commission, Dr. F. F. C. Curtis, acted as consultant.

PASSENGER WAITING HALL,
SOUTHAMPTON

4, looking into the hall from the eastern vestibule. 5, inside the vestibule, looking towards the hall. The panelling is elm. 6, the writing room (5 on plan opposite), reached from the hall through the telephone room. The panelling and tables are of weathered sycamore, the latter being cantilevered from the wall on metal brackets. Tabletops are of black hide.



4



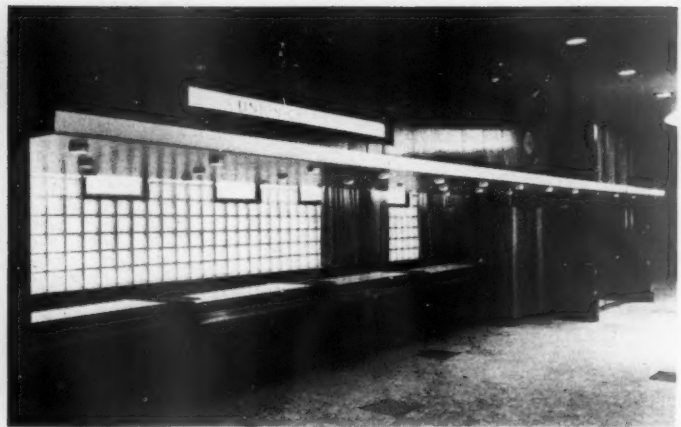
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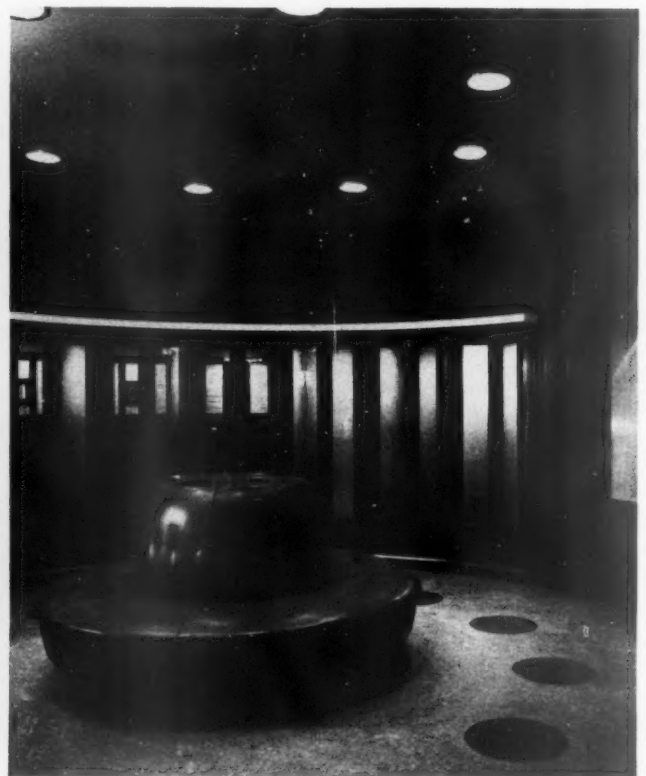
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7, a corner of the hall adjoining the entrance from the quay, with fixed seats covered in hide. 8, the ticket office and bureau-de-change in the centre of the hall, faced with elm and teak. 9, the steamship ticket counter on the south side (11 on the plan), also faced with elm and teak. On the right is the entrance from the quay, framed in Genoa marble. 10, the buffet in the south-west

corner (12 on the plan). 11 (below), inside the immigration room, which opens off the hall in the south-east corner. The desks and stools are of limed oak; the wall behind them is faced with slats of Honduras mahogany. 12, inside the telephone room. The walls are faced with slatted teak; the seat is covered with red hide.



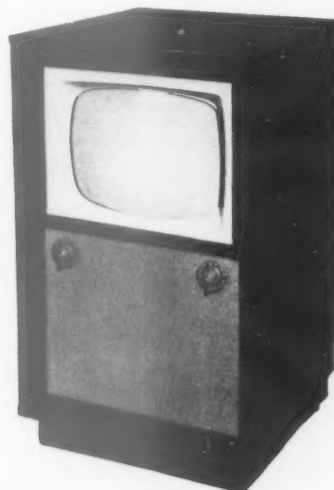
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12

2 DESIGN REVIEW

These seven television sets are illustrated as representing typical fashions in design prevailing at present throughout the British television industry. They are criticized alongside as being too sedate and unadventurous.



The Appearance of TV Sets

Television is a new art form, so it is not surprising if we find its productions childish or uneven. The design of television receivers, however, is hardly a new art form. One assumes from studying the available models that a set needs a container that is roughly cubic, or for a floor model a cube and a half. The existing techniques of the furniture industry should be able to manage this. Certainly no challenge can have been met with more unanimity. In looking round a television showroom it is necessary to have a training in design to spot the differences. Are all the producers copying each other? Or is the newly constituted television public so articulate that it literally demands sets in dark veneer and, to use Mr. Betjeman's well-worn phrase, ghastly good taste.

The TV set is the successor to the open fire as the focus of the living room. Curiously this potentially more intelligent focus has exactly the same drawback as the fire—one which central heating was to have freed us from—when it is not on it is actively boring. Many people feel restive under the hypnotic stare of that vacant rectangle. To have as the centre of the family circle a box the size of a refrigerator, and about

as interesting, is a depressing situation. Surely the focus of our leisure hours had better not take that form. The caption advertising the Murphy V230, 1, is 'What! no box?' And what a relief it is. Some of the boxes



1

offered are detailed with care, but always inside the same formula. The same situation has arisen as in motor-car design. As soon as one firm hits upon a new formula the other firms race to produce near modifications of it. Then at the next successful breakaway the cycle starts over again. In the more restricted volume of the TV set distinctions are exceedingly nice. One feels nevertheless that the customer is at the mercy of a design



2

ring. Imagine future generations buying up antique TV consoles and converting them to modern uses for their sheer beauty, as we do square pianos and Victorian washstands. Yet the design of something whose sole purpose is to be looked at should be worth some thought.

One solution to the problem is to build the TV set into a general storage scheme. This requires money and enterprise. A second is to use a projector and focus the room around a screen. There is a projector on the market made by Ferranti, but this is designed to be indistinguishable

from any other set with doors. It is a decent cabinet, but like all the others of such formidable respectability as to strike a note of reproach in any room where gaiety or relaxation is the keynote. The designers of Flat 56 were forced to imagine a model of their own.

The client who can afford to build up fitments for his living room can, of course, put any face he chooses on his tele. How long will the more modest viewer in our democracy have to go on staring at this prim satire on free enterprise?

Diana Rowntree.

2 and 3, combined model for TV and sound designed by Pierre Paulin as the focal point of a 'coin de musique-spectacle.' A lighter and altogether more domesticated piece of furniture than anything we have in Britain.

Where are the Days, Conrants and Races of radio design?

Where are all those designers from the schools of engineering design at the RCA and the Central School?



3

Denby Pottery

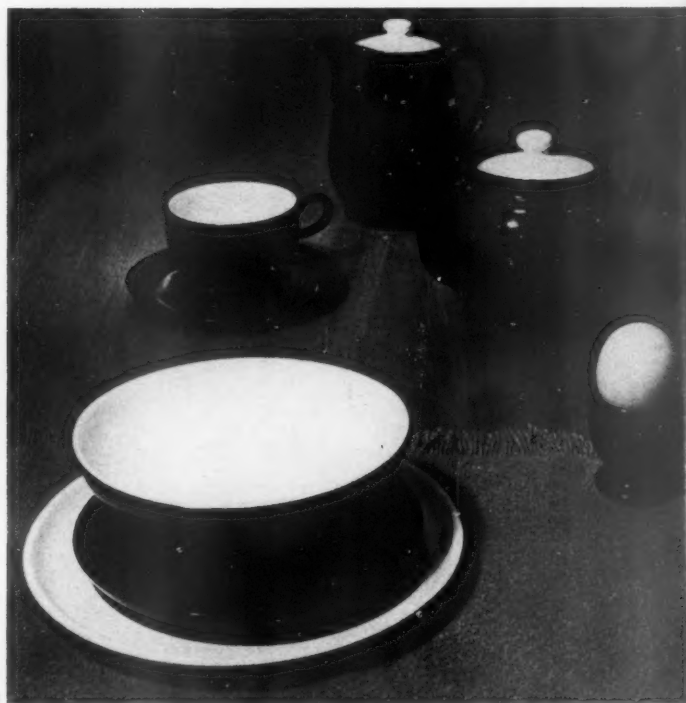
The exhibition of Denby Pottery held in March at the Tea Centre calls forth two comments of general significance to the design of ceramics.

Firstly the promise of the gaily shaped pots on the poster, 4, was not fulfilled by the pottery on show. It is true that this promise was not intended literally. The firm's policy in commissioning the poster was to avoid giving particular publicity to any one of their varied wares. The artist, Sheila Stratton, was asked to suggest the basic idea of the Denby shapes. Her suggestion has in fact given the traditional coffee-pot and dish forms that added excitement which is the proper contribution of art to industrial design. One cannot help imagining the stimulus an artist's mind could bring to the shapes of the pots themselves. The traditional shapes of domestic utensils tend to weaken and soften with the years. A first-class designer or artist could reaffirm them in such a way that we should have a vernacular pottery capable of competing with the Italian. Of the many ranges of Denby ware the 'Eclipse', in black and white, 5 and 6, is nearest to the vigour of the best casserole shapes. But black and white was a disappointment after the poster's glimpse of black, red and green used so boldly. If one



4

4, the shapes used on the poster and invitation card to the exhibition. They have an elegance and a broad colour treatment not found in modern British pottery. 5, 'Eclipse' breakfast ware. Compare with the coffee-pot in the poster.



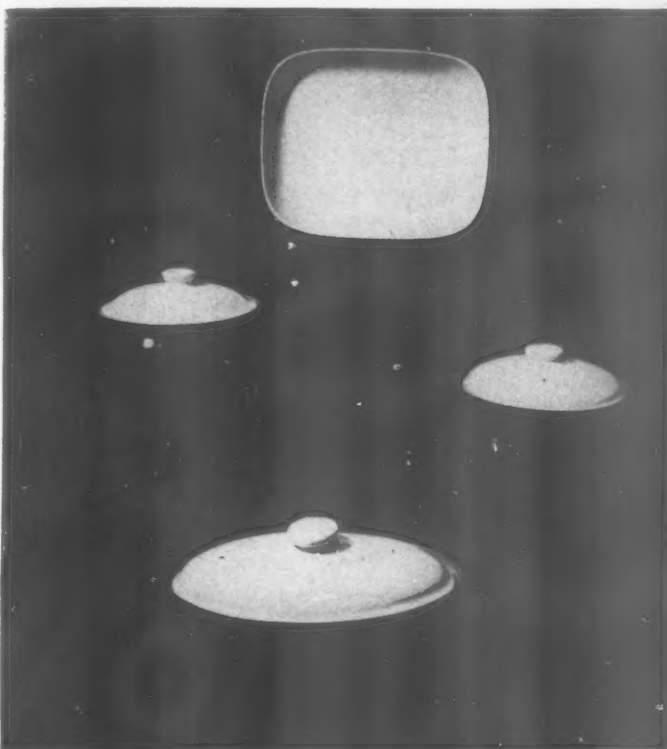
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wanted strong colour in the kitchen one would not be satisfied with the gentle, and often genteel, decorations offered.

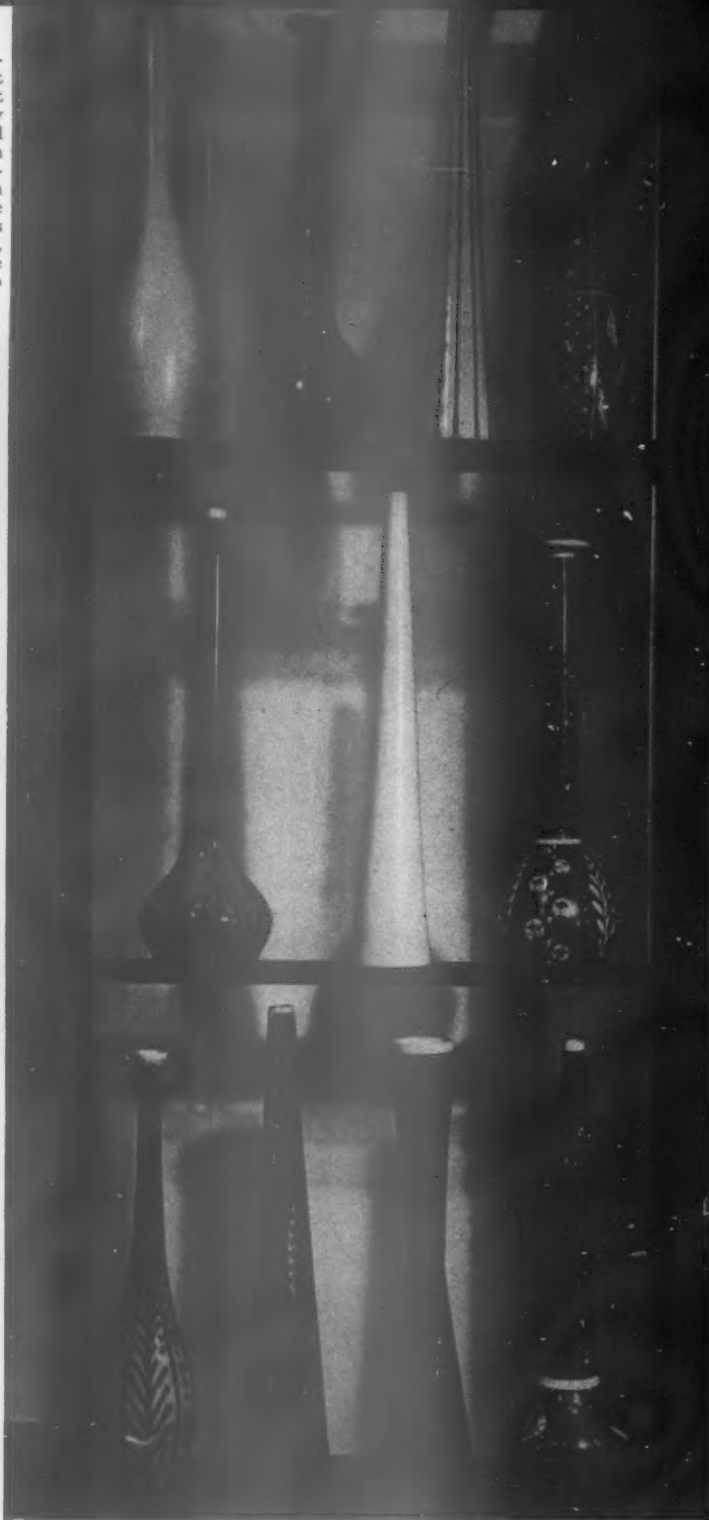
The second arresting contrast was part of the exhibition technique. Outside the entrance was a case of undecorated pots, 7, the functional and original shapes forming a dramatic group with which the decorated products, 8, could not compete successfully. It is not easy to enhance the dignity of these slender silhouettes. Is there any need to

try? Be that as it may the potentialities of industrial design, or just plain art, for this purpose have not here been exploited. Denby Pottery has a fine living tradition, and when it comes to mounting an exhibition they can pick an exhibition designer and a poster artist with skill. We hope they will not be deterred from the task, which is today immeasurably more difficult, of finding artists who can bring the surface decoration of their pots up to the same level.

D.R.



6



8

6, casseroles in 'Eclipse' ware from Denby Pottery. 7, case of unfired vases. 8, the same shapes finished and decorated.

Edinburgh Weavers

The Edinburgh Weavers' new showrooms in Mount Street houses a remarkable range of ideas over and above the good quality of the weaves.

The scale of the weaves ranges from that of the yarn itself to the enormous scale of 'Pastoralle' and 'Temerity' with its 5-in. stripe. One weave of distinction not here illustrated is 'Cadenza'. This shiny cotton-rayon material is in black, white, brilliant red, purple and green with a hair-fine stripe in black,

or in the case of the black a white.

This firm's admirably catholic attitude to artists and designers results in the greatest variety of prints. At one end of the scale is Keith Vaughan's enormous figure drawing, at the other Humphrey Spender's highly disciplined design for a chintz, 'Flurry.' This expresses perhaps for the first time the lightness, and light-reflecting qualities of this material. Mid-way between these extremes is Geoffrey Clark's 'Grape.' Here the combination of

largeness of scale with sensitive draughtsmanship, of rich colours used with semi-abstract simplicity produces an impersonal unemphatic quality which is as rare in textile design as it is, to my mind, essential.

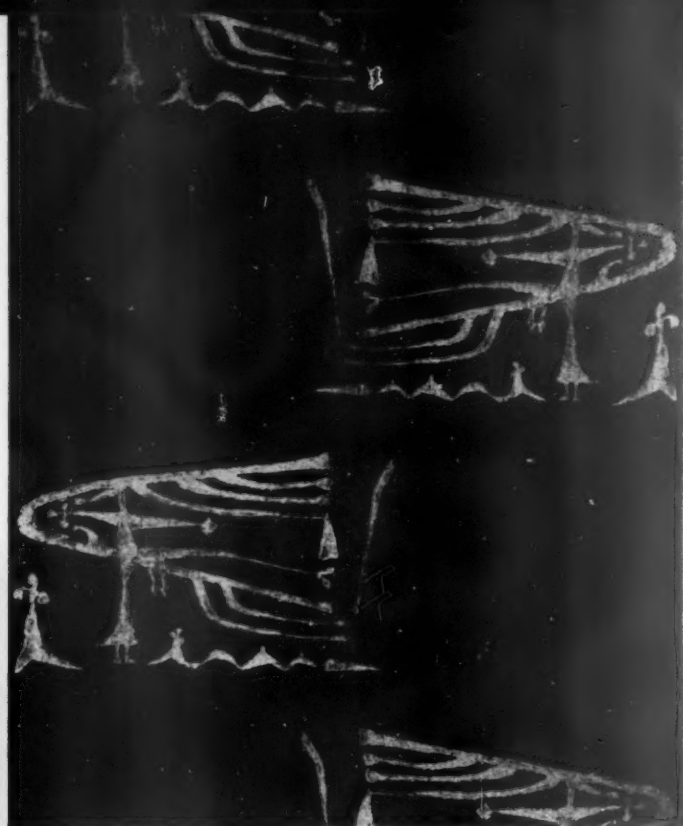
The range of chintzes here is in a truly contemporary spirit. There is a bold well-designed stripe, 'Flurry' an informal stripe, and informal designs that get right away from the traditional primness. Contessa Colbertaldo's 'Tuscany' gives an impression of a third dimension that has an effect of remarkable softness.

D.R.

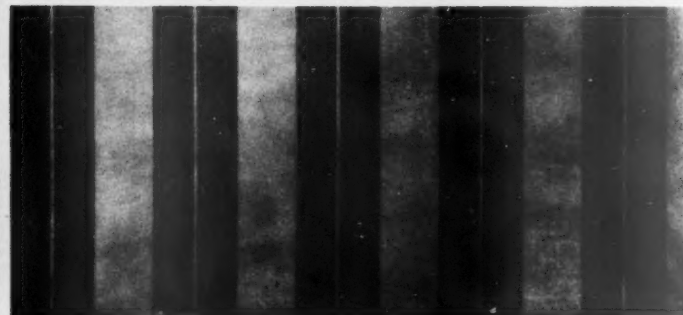
New textiles from Edinburgh Weavers: 9, heavy weaves in cotton and rayon. Left 'Pastoralle' in grey-black or red and white. Approximately 44s. per yard. Right 'Temerity' in grey or black and white. Approximately

30s. per yard. 10, examples of well designed small scale weavers from the large variety stocked. 11,

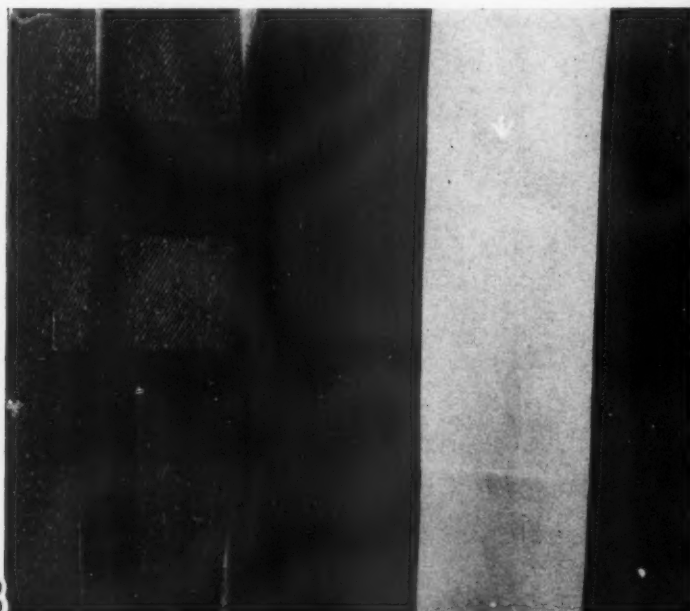
'Grape,' Geoffrey Clark's screen print on linen. Extremely successful with a very dark brown ground, the motifs printed in greenish grey and copper on white. This sets up a shimmer that shows the design with its full subtlety. Approximately 25s. per yard. 12, striped chintz in a range of 12 colours from charcoal to pastel shades. Approximately 14s. per yard. 13, chintz 'Tuscany' by Contessa Colbertaldo. In a range from black to pastel shades. The technique of the drawing here gives the fabric a recessive quality very useful where hangings are required to break down shapes rather than emphasize them.



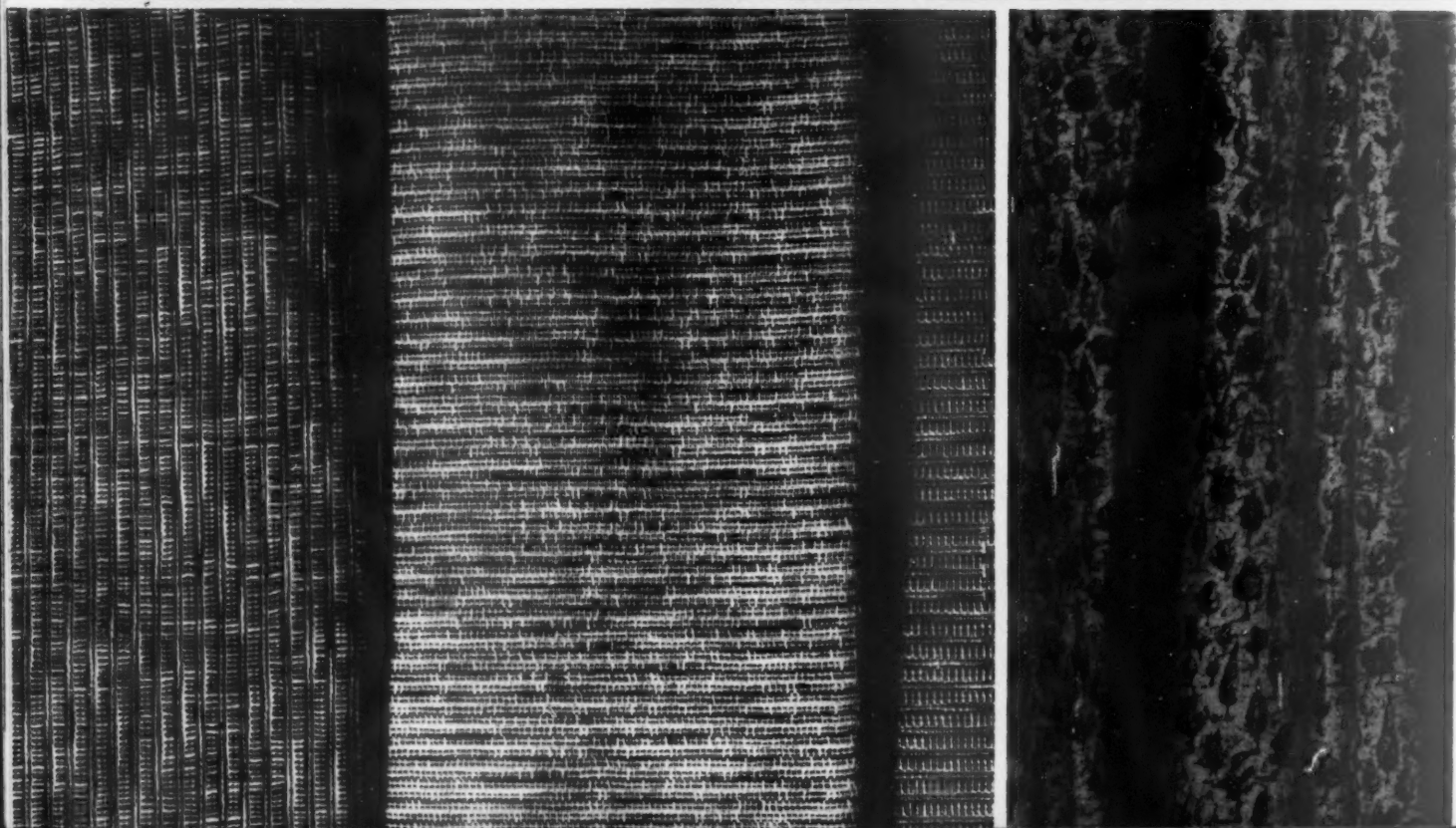
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13

3 TECHNIQUES

DAYLIGHT AND VENTILATION THROUGH THE ROOF

by Robert Maguire

Occasionally the functional principles behind the design of a commonplace building element are taken for granted and not subjected to the analytical scrutiny which is characteristic of the modern movement. When this happens, the architect is likely to find himself at the mercy of the manufacturer, and in the case of rooflighting this has certainly been so. However the recent advent of new materials, such as resin-bonded glass fibre, and new techniques, such as the economical casting of large glass areas, has encouraged a reconsideration of form and, through it, of function—a reversal of the logical procedure. The result is a separation, at last, of lighting and ventilation.

Remembering that glass roofs were so fruitful a source of inspiration in the engineering structures of the nineteenth century, it is surprising that the technical development of rooflighting should subsequently have remained static. This may be due to some extent to the concentration of emphasis on the development of the troublesome glazing bar to the neglect of the structural possibilities of glass; or again to a proneness to regard the function of the rooflight as similar to that of the ordinary window.

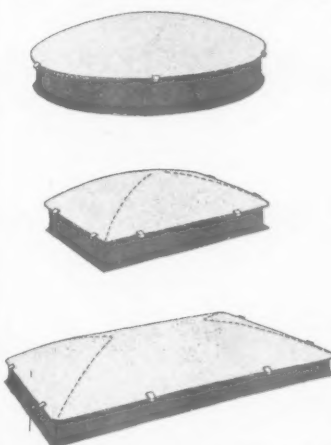
From the functional point of view the chief difference between a window and a rooflight is that there is a strong case for making a window openable. For though a fixed pane and an adjustable louvred ventilator may together produce some of the physical effects of an opened window they are no real substitute: the physical experience of an opened window cannot be simulated. But provided there is ventilation to hand, there is no comparable motive for opening a rooflight. Yet it is this provision of a means of opening which complicates the design of a light, whether in a window or in a roof, and which has perhaps inhibited the design of rooflights. Now, at long last, we are coming to realise that their glazed parts need no longer open, and that as a consequence their design can be rationalized and most of the associated gadgetry eliminated. In addition the great amount of research carried out on ventilation has resulted in its becoming a highly specialized matter, and equipment of great efficiency is now available. It is therefore often of advantage to separate lighting from ventilation entirely.

This article is concerned with types of rooflighting recently introduced which recognize these distinctions. In some, ventilation has been differentiated but remains part of the same unit, while in others it has been entirely omitted, reliance being placed on specialized natural ventilation equipment. Some of the latter are also described, but the selection is not intended to be comprehensive.

Domelights

Glass. One-piece dome rooflights in rough cast glass are available in circular, square and rectangular

shapes, 1. The range of sizes is large: circular domes may be obtained from 18 in. to 72 in. in increments of 2 in., while for square and rectangular domes there are a number of standard sizes up to 72 in. by 48 in. The 72 in. maximum size is considered to be the limit to which a piece of glass, even if doubly curved, can safely



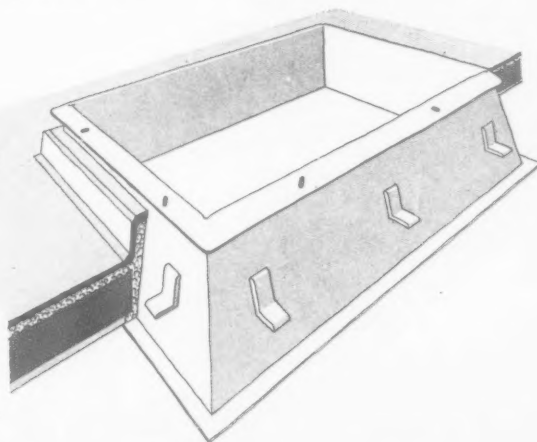
1, circular, square and rectangular glass domelights. Sizes: Circular 18 in. diameter to 72 in. diameter in 2 in. increments. Square, 36 in., 42 in., 48 in. Rectangular, 48 in. by 36 in., 60 in. by 42 in., 72 in. by 48 in.

support itself. The domes are normally unreinforced, but can be supplied in wired glass if required. Owing to the method of manufacture wired glass domes may develop cracks, but the manufacturers claim that these remain watertight and the dome will still be perfectly safe.

Square and rectangular domelights are slightly more expensive area for area than the circular type, but this may be offset by the cost of trimming the simpler opening in the roof.

The operation of forming accurately shaped openings and the curbs on which the domelights rest can be simplified by using prefabricated combined curbs and linings, 2. These are made of mild steel or aluminium, and have the added advantage of reducing the width of the curb, a matter of some importance since a loss of only 2 in. around the outside of a 36-in. circular dome will cut out 25 per cent of the light. To increase the effective lighting further, the prefabricated linings are splayed.

Whether supported on linings or curbs formed by the builder, the domelights are bedded on asbestos pads and secured with metal clips at intervals. The combined action of the clip and asbestos allows the dome to find its own bed while at the same time preventing lifting by wind.



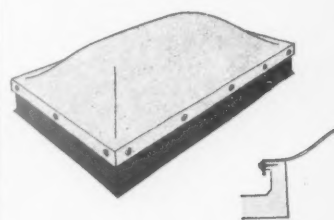
2, a combined curb and lining for glass domelights.

Acrylic Sheet. Domelights in 'Perspex' acrylic sheet are now made, and standard types are available similar in shape to those of glass. For use with lightweight constructions acrylic sheet has the advantage of weighing only half as much as glass, so cutting down dead load.

The method of manufacture is appreciably different from that of glass domelights, and can be modified without difficulty to enable special shapes to be made at no great increase in cost, even for small numbers. The size of special domes is limited to 66 in. by 42 in.

Fixing of the standard domelights is usually carried out with metal clips in a similar way to that already described for glass, but the manufacturers have suggested that this could be simplified by moulding the material of the domelight itself to form a flange which can be fixed with screws and washers direct to the curb, 3.

The acrylic sheet can be produced



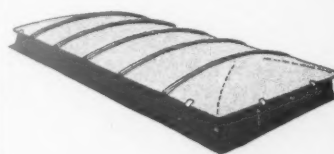
3, a domelight in 'Perspex' acrylic sheet, suitable for fixing direct to the curb.

clear (giving 92 per cent light transmission), in white opal, or in transparent or translucent colours. It can be drilled with ordinary tools and is shatterproof.

Continuous Strip Rooflights for Flat Roofs

Glass. The makers of glass domelights have developed the principle of increasing the spanning strength of glass by curving it, to provide a simple solution to the problem of continuous strip glazing for flat roofs. Owing to the limitation in size of glass units, the system still requires transverse glazing bars, but since these can be of the simplest form and arrangement, an extremely neat appearance is possible.

The rooflight consists of 2-ft. wide curved sheets of rough cast glass forming a continuous barrel-vault of 4-ft. or 6-ft. span which may be stopped at the ends with half-domes, 4.

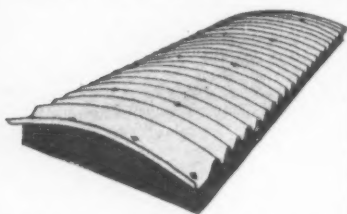


4, a continuous strip rooflight in curved glass with half-dome ends. Available to any length (multiples of 2 ft.) and in widths up to 7 ft.

Only the glazing bars and the half-domes are fixed to the prefabricated curb, which is combined with the lining and composed of unit lengths.

Acrylic sheet. By using acrylic sheet in corrugated form, continuous strip rooflights can be constructed without glazing bars, 5. The sheet is fixed to the in-situ concrete or pressed metal curb by means of bolts in the bottom of the corru-

gations; a special washer has been developed to avoid the leakage of rainwater. The internal width of the rooflight may be up to 8 ft. without



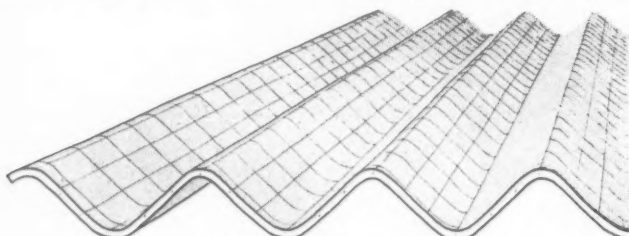
5, a continuous strip rooflight in corrugated 'Perplex.' Widths up to 8 ft. without extra support are possible.

requiring extra supporting structure, while the length is unlimited.

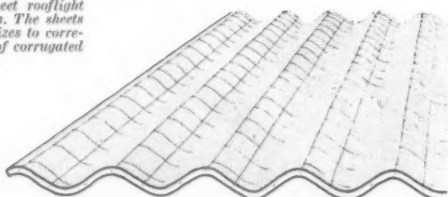
Glass fibre laminate. The corrugated sheets of resin-bonded glass fibre, which will be described more fully later, are also available curved to a minimum radius of 13 ft. These may be used for continuous rooflights in a similar way to acrylic sheet.

Translucent Corrugated Sheetings for Pitched Roofs

Glass. Recent developments in glass production have enabled sheets of corrugated and wire-reinforced plate glass to be produced. These are now available in two profiles, 6-in. and 3-in. pitch, 6, which conform

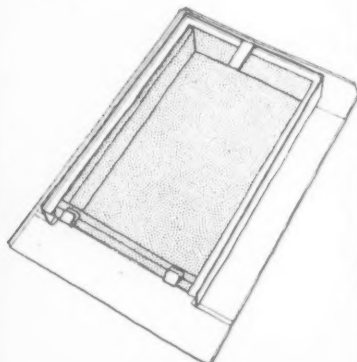


6, 6-in. pitch and 3-in. pitch 'Corroglaze,' a sheet rooflight of wired cut glass. The sheets are produced in sizes to correspond with those of corrugated roofing materials.



with the more common profiles of sheet roofing materials. Being completely interchangeable with the normal roof sheeting, the corrugated glass can be arranged to form 'sheetlights' of any shape or size.

Fixing is by simple hook-bolts which are designed to avoid drilling of the glass.



7, the 'Skyvent,' a small single-pane skylight incorporating permanent ventilation. Maximum size 24 in. by 36 in.

Acrylic sheet. The ease with which acrylic sheet can be moulded to any form has allowed the manufacturers to produce a sheetlight to suit every type of corrugated roofing. The material can be drilled, so that fixing may be similar to that used for the asbestos, aluminium, or corrugated iron sheets of the roof covering.

Glass fibre laminates. Resin-bonded glass fibre is a very recently introduced material which is finding applications in many fields. It consists of a core of glass fibre which acts as reinforcement to the tough, lightweight synthetic resin, forming a sheet with nearly three times the weight-for-weight strength of steel. The material may be opaque or translucent, clear or coloured, and in its clear translucent form has a light transmission of over 90 per cent and good diffusing properties, making it an ideal material for sheetlights. The method of manufacture enables it to be moulded to any profile, and a wide range is available to suit most corrugated sheetings.

Fire resistance tests have shown the material to have a good performance, due mainly to the indestructible nature of the glass fibre core. It is also shatterproof.

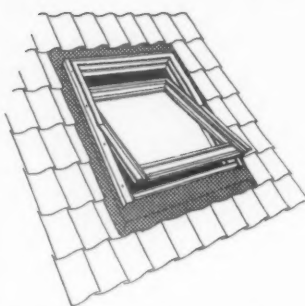
Single Pane Skylights for Pitched Roofs

Glass. Small skylights consisting of a single pane of glass set in a

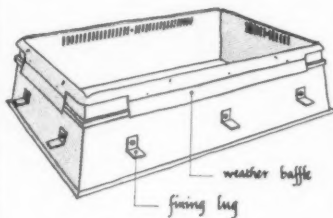
flushed upstand are no new feature, and in the past have usually been detailed specially by the architect for the individual job. The relative complexity of the flashings, curb and lining necessary for so simple a requirement as fixing a single pane justifies the development of a prefabricated unit incorporating all these elements. The Skyvent, 7, is a very neat solution to this problem. It is made in galvanized steel or copper, and is available in a range of sizes from 12 in. by 15 in. to 24 in. by 36 in. Permanent ventilation is arranged close to the undersurface of the glass; this also eliminates condensation.

Fixed glass skylights for use with various types of corrugated aluminium roofings are supplied by the manufacturers of the roofings (see *Aluminium Roof Coverings*, AR, March, 1956), and are designed to be interchangeable with their standard sheets.

The Velux domestic skylight, 8, does not truly come within the scope of this article, since it is a development of the Velux window and is intended for use as a low-level window in attic rooms, but is mentioned because it is an interesting



8, the 'Velux' skylight, a double-glazed horizontally-pivoted window for attic rooms.



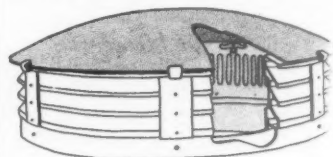
9, a combined curb and lining for glass domelights with hit-and-miss ventilators.

solution to the problem of flashing and weathering a complex prefabricated unit while retaining a tidy appearance. It is double-glazed and centre-pivoted, and gives better light

distribution in the room than a dormer window of the same area.

Ventilating Curbs

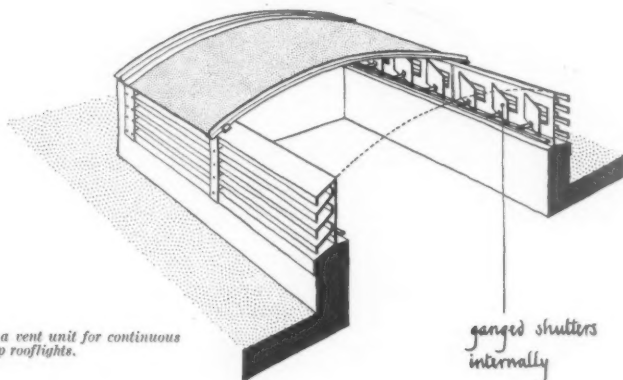
Domelights. The metal combined curbs and linings made for use with glass domelights have been developed further to provide controllable natural ventilation. One type, 9,



10, a vent unit for domelights, available with or without the internal hit-and-miss grille.

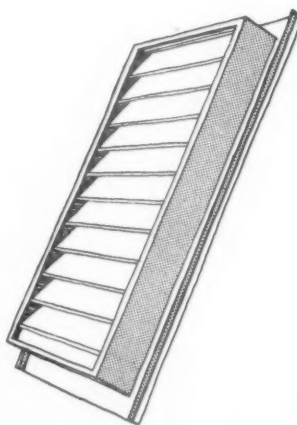
has a simple hit-and-miss grille which is protected on the outside by a metal weather baffle. If more ventilation is required, a higher standing unit can be used which contains three continuous rows of louvre blades, 10. This is available with or without hit-and-miss grilles on the inside face.

Continuous rooflights. Ventilated upstands for continuous glass rooflights are made in unit lengths to correspond with the spacing of the glazing bars, 11. They consist of metal louvres with an internal lining of ganged shutters which may be remote controlled.

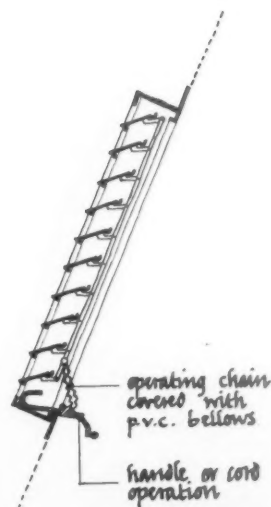


11, a vent unit for continuous glass rooflights.

ganged shutters internally



12, a ventilator with adjustable horizontal louvre blades for use in pitched roofs.



operating chain covered with p.v.c. bellows

handle, or cord operation



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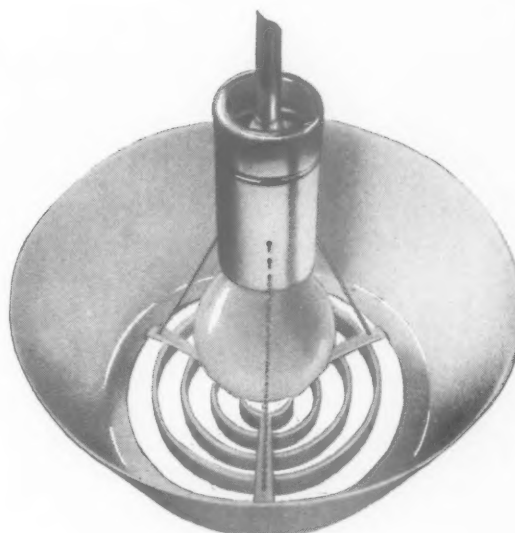
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SPECIFICATION. The 12" diameter louvred diffuser is moulded in a white translucent non-static high temperature plastic, and its position is adjustable for use with a 200w., 150w. or 100w. lamp. Direct downward lighting is obtained through the louvred aperture, the top is open giving shadowless ceiling illumination. Diffused general lighting with low brightness is obtained through the translucent sides. Metalwork is in anodised aluminium, finished satin silver.

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continued from page 354]

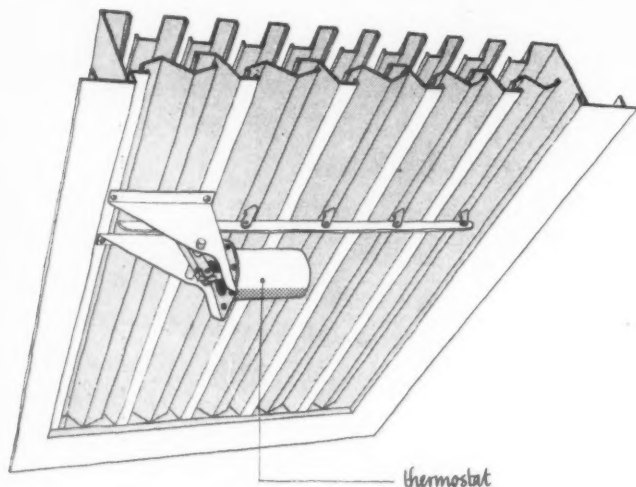
Natural Extract Ventilators

Roof ventilators which do not rely on fan-powered extraction are of two types: flush-mounted, which are usually louvred and controllable, and those which protrude from the roof in order to take greater advantage of wind for aerodynamic extraction.

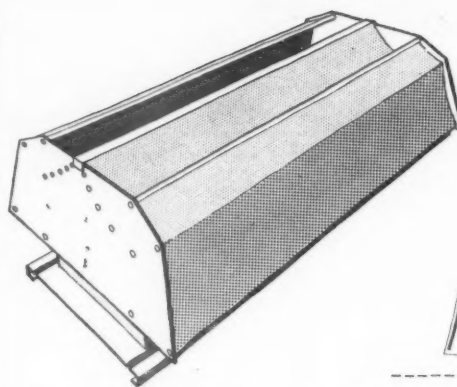
Flush-mounted ventilators. To remain weatherproof this type should not be fixed at too low a pitch: 30 deg. is considered to be the minimum. Two kinds are available, with horizontal or vertical louvre blades, 12 and 13. The horizontal

type gives 100 per cent clear aperture when fully opened, and it operates by a worm gear and chain of the type used for car windcreens; the chain is covered by a p.v.c. bellows. The vertical-louvred units contain two layers of blades, the top layer being fixed for weatherproofing, and the bottom layer having alternate blades pivoted. The pivoted blades are gang-operated either manually or by a non-electrical thermostat.

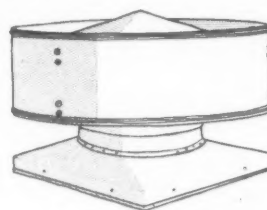
Protruding ventilators. A great number of different shapes of roof-mounted ventilators are available, of many shapes and sizes. Because of



13, a roof ventilator with vertical louvers which will remain weatherproof even on low-pitched roofs. Alternate blades of the inner louvre rotate to control ventilation; these may be operated either manually or by a thermostat, as shown here.



14, a natural extraction ventilator for industrial buildings.



15, a circular natural extraction ventilator.

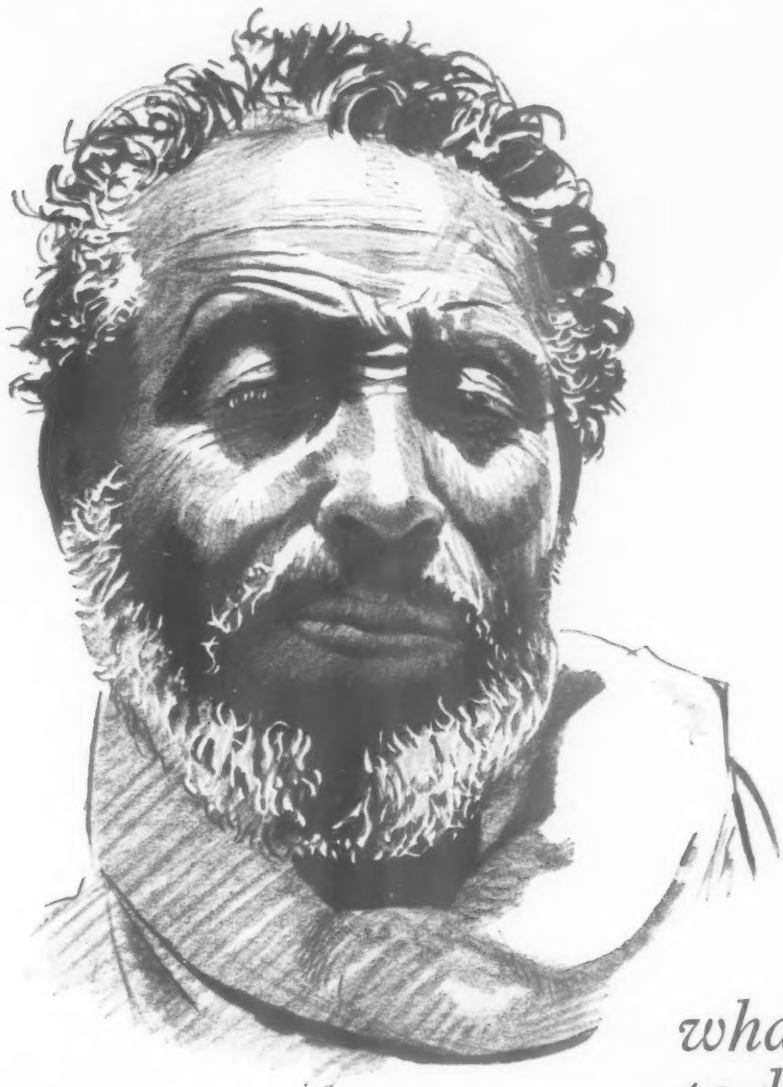


their conspicuous position, it is unfortunate that so many of them are of nondescript appearance; the aerodynamic principle, one feels, should produce inevitable good looks in this field as in others. Two are illustrated here which are both efficient and neat in appearance, 14 and 15. A third, which is intended for mounting on the ridge of a double-pitched roof, 16, appears flush with the roof covering on the outside, but is in effect a modified version of a protruding type. It can be adjusted to fit roofs of any pitch.

[Illustration 16 to this article, and the Acknowledgments, appear on page 355.]

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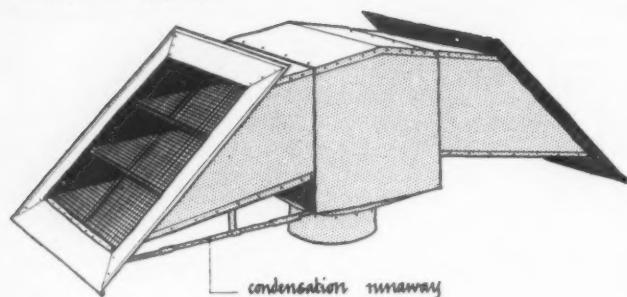


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16, an extractor ventilator for concealed ridge mounting.

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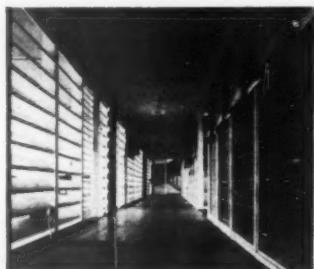
T. & W. Ide Ltd.: 1, 2, 4, 9, 11. Greenwood's & Airvac Ventilating Co. Ltd.: 7, 10, 15. Colt Ventilation Ltd.: 12, 13, 14.

Imperial Chemical Industries Ltd.: 3, 5. Corroglaze Ltd.: 6. The Velux Company Ltd.: 8. G. A. Harvey & Co. (London) Ltd.: 16.

4 THE INDUSTRY

Tropical Openwork Screen

We illustrate (right) an interesting use of steel wire mesh at the Kumasi College of Technology in the Gold Coast (which was described in the May issue of the ARCHITECTURAL REVIEW). The problem was to find a material which would be strong enough to serve as a protecting screen to stores, but would give free passage to air and would stand up to a very humid atmosphere. The choice was BRC Weldmesh Ref.

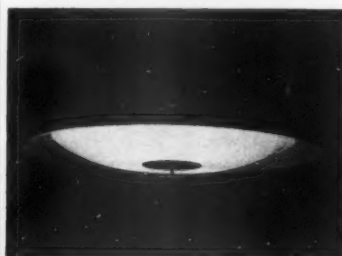


No. 31, which is a 3 in. by 1 in. mesh manufactured with 5 s.w.g. main wires and 10 s.w.g. cross wires. The panels are 6 ft. 8 in. high and 2 ft. 11 in. wide. The mesh was coated with anti-rust primer and painted three coats, and is secured with wood beads to a wood frame.

B. R. C. Engineering Co. Ltd., Stafford.

Lighting Fitting

By general standards of design prevalent in Italy the Milan Triennale must be one of the world's arbiters of fashion, and to receive an award at this show is probably one of the highest compliments obtainable. The FM.7012 lamp (below) received a



silver medal at the recent tenth Triennale and is yet another of the prize-winning designs by John Reid for George Forrest & Son Ltd. It consists of a stove-enamelled black spun-aluminium reflector, 2 ft. in diameter, with a convex opal glass shade. The fitting is designed for four 40-watt bulbs which are easily

replaced via the satin-silver-plated screw release catch in the centre of the glass shade. A special ceiling rose is supplied and the lamp is marketed at £17 16s. 9d. (including purchase tax).

George Forrest and Son Ltd., Osborne Road, London, W.3.

Waist-High Oven

After nearly two decades of persistence there is at last a waist-high oven back on the market with the very original innovation of a grill set in the top of the oven. This composite cooker is manufactured by English Electric and is available in white or cream at a cost of £70, there being no purchase tax at the



The new English Electric cooker with raised oven.

[continued on page 360]



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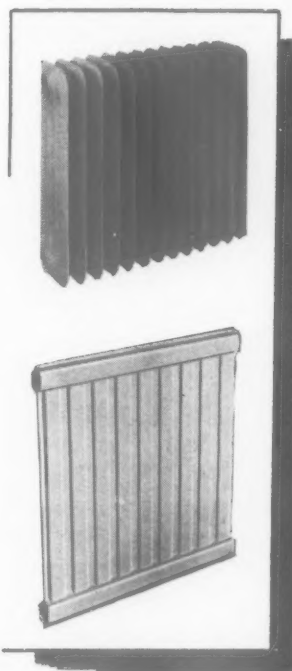
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Top illustration shows a three column Stelrad, and below a wall radiator.



continued from page 358]

moment on cookers. As can be seen from the illustration, the lower half of the cooker contains a storage cupboard and three hot plates, and above this hob is the oven. The very individual occupation of cooking is regrettably reduced to mathematical accuracy by the adaptation of such things as a pre-selected time switch, but the old-type three-position switch (high, medium and low) is improved upon by the inclusion of simmerstat switches which give a wider range of temperatures. The whole unit measures 25½ in. wide, 26 in. deep and 61 in. high, weighs 238 lb. and should be fitted to a 30 amp. cooker circuit.

The English Electric Co. Ltd., Marconi House, Strand, London, W.C.2.

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Bank of England Printing Works. Architects: Easton & Robertson. Quantity surveyors: Gardiner & Theobald. Consultants: Structure: Ove Arup & Partners. Mechanical services and electrical installations: Edward A. Pearce & Partners. Drainage: Daniel Longden. Acoustics: Hope Bagenal. General contractors: Sir Robert McAlpine & Sons. Sub-contractors: Mechanical and ventilating installations: G. N. Haden & Sons. Electrical installations: Electrical Installations Ltd. Windows and north lights: Crittall Manufacturing Co. Patent glazing: British Challenge Glazing Co. Lifts: Waygood Otis Ltd. Wood block and Strip

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Buildings in Hong Kong. Architect: Prof. R. Gordon Brown. Steel windows: Crittall Mfg. Co.; Henry Hope & Sons. Door furniture: James Gibbons Ltd.; Union Locks Ltd.; Josiah Parkes & Co. Laboratories equipment: Baird & Tatlock (London) Ltd. Light fittings: General Electric Co. Lifts: Waygood-Otis Ltd. Sanitary fittings: Shanks & Co.; Twyford Ltd. Air-conditioning: Gilman & Co. Glass: Pilkington Brothers Ltd. Floor tiles: Semtex Ltd.; The Marley Tile Co.

Health Centre at Welwyn Garden City. Architects: C. H. Aslin, County Architect, and Patricia A. Townsend. Consultants: structural, Ove Arup & Partners; electrical, T. Bottomley, County Architects' Department. Quantity surveyor: E. F. Martin, County Architects' Department. 'Punt' system of roof units and wall panels designed by Ove Arup & Partners, in conjunction with the County Architects' Department and C.D. Productions Ltd. Clerk of Works: F. L. Green. General contractors for site slab, site works, boiler house and drainage: Crook Bros.; superstructure, installation and finishes: C. D. Productions Ltd. Sub-contractors: roofing felt: Permanite Ltd. Glass: James Clark & Eaton Ltd. Thermo-plastic flooring: Hollis Bros. Composition block flooring: Granwood Flooring Co. Waterproofing material: Tretol Ltd. Central heating, hot water and boilers: Weatherfoil Heating Systems Ltd. Electric light fixtures: Falk Stadelman & Co.; Hume Atkins & Co.; Nettle Accessories Ltd. Coatpegs: A. J. Binns Ltd. Slate sills: Bow Slate & Enamel Co. Paint: Joseph Freeman, Sons & Co.

Flats in Osnaburgh Street, London, N.W.1. Architects: Davies & Arnold. Assistant-in-charge: R. Tucker. Consulting engineers: G. A. Dodd & Partners. Quantity surveyors: C. E. Ball & Partners. General contractors: John Laing & Son. Sub-contractors: (structure) demolition: Lea Bridge Demolition Co. Asphalt: General Asphalt Ltd. Reinforced concrete: Caxton Floors Ltd., and John Laing & Son. Slates: London Slate & Tile Roofing Co. Glass: Faulkner Greene & Co. Artificial stone: The Atlas Stone Co. Structural steel:

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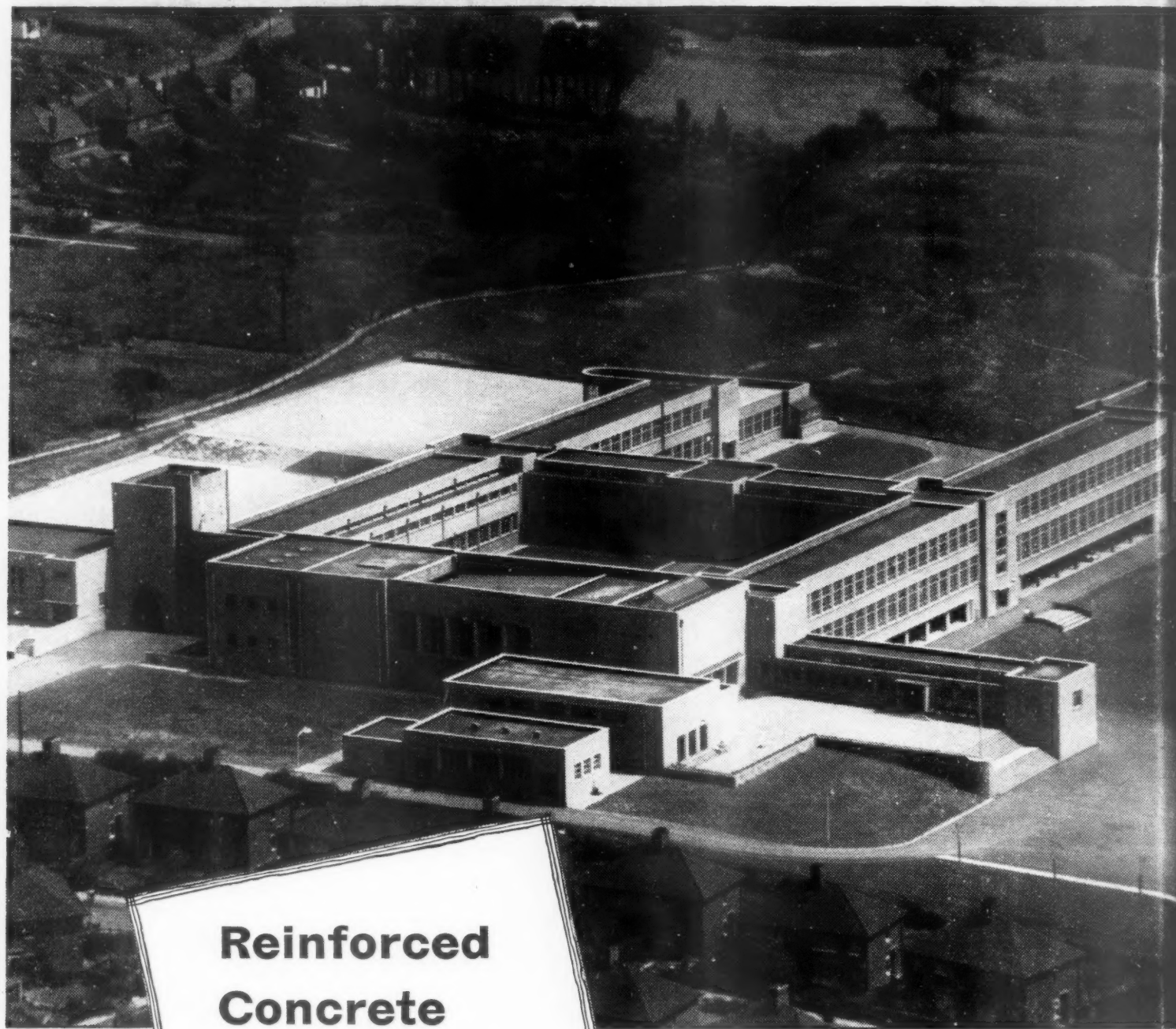
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